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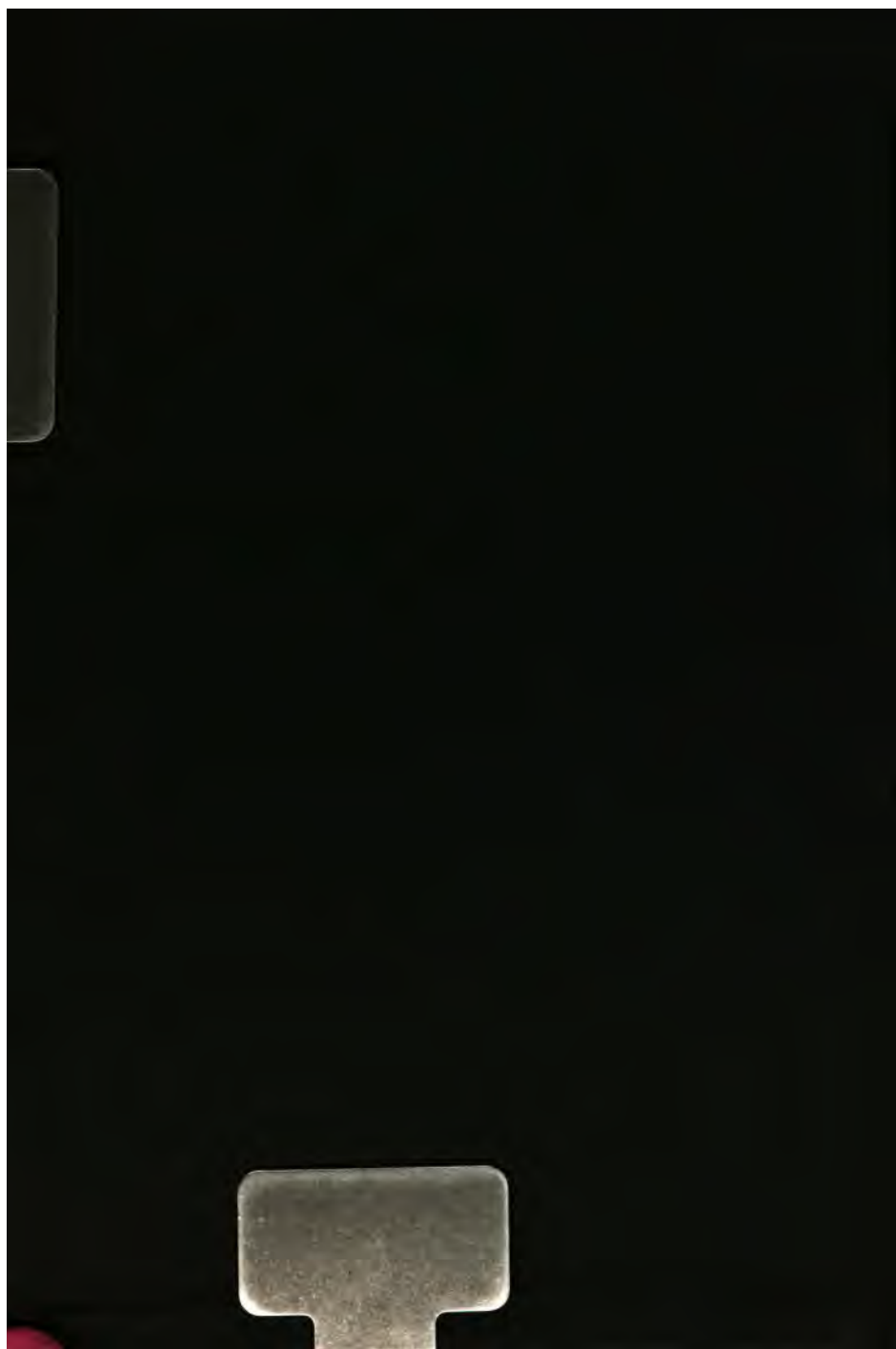
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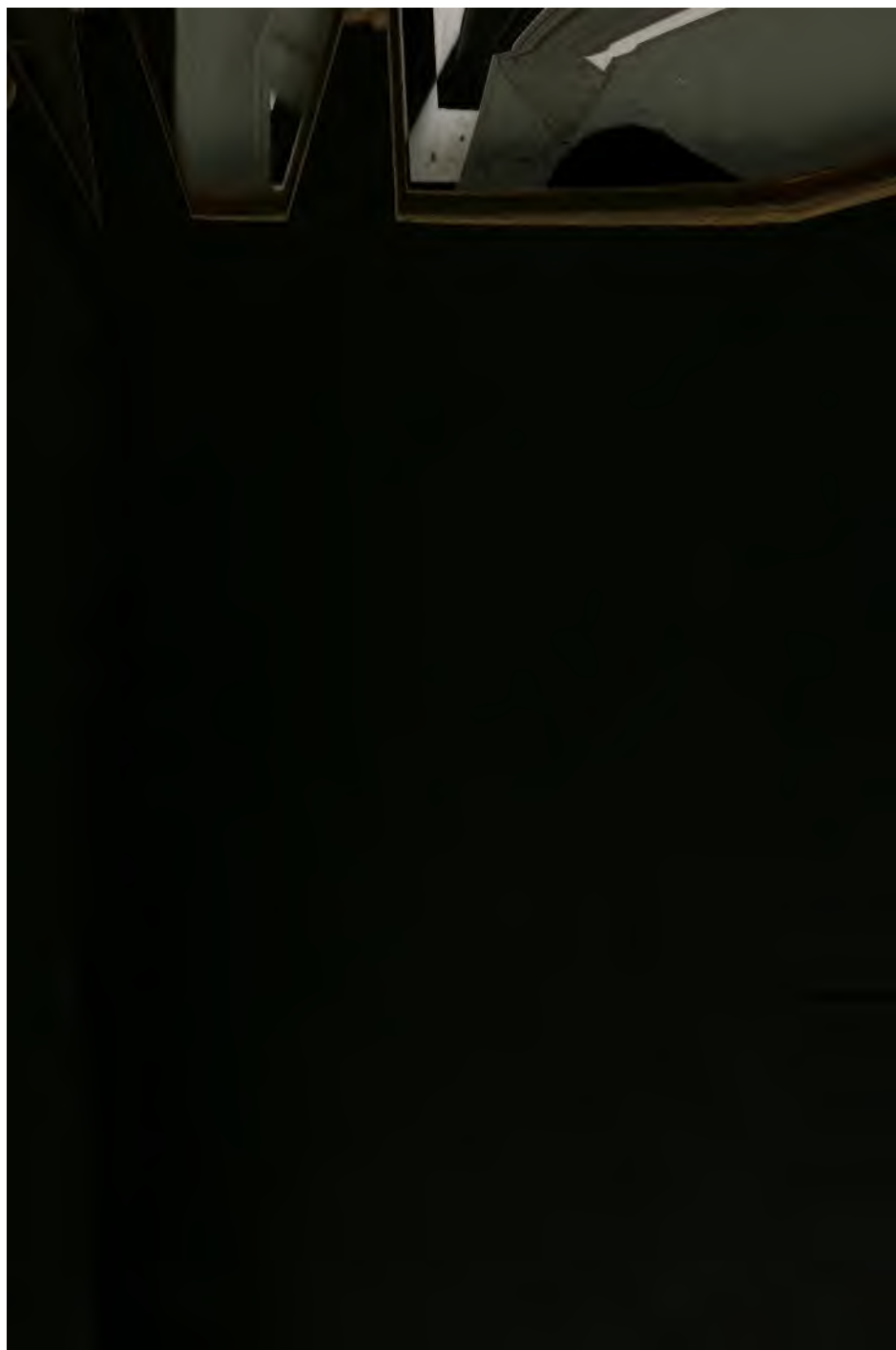
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A WALK
ALONG THE
TEUFELSMAUER AND PFAHLGRABEN

BY
J. L. G. MOWAT, M.A.
FELLOW OF PEMBROKE COLLEGE, OXFORD

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AUTHORITIES.

1. A. von Cohausen, *Der Römische Grenzwall in Deutschland*, 2 vols. 8vo. Wiesbaden, 1884.

2. Thomas Hodgkin, *The Pfahlgraben*, printed in *Archæologia Æliana* for 1882. The author cites:

(1) Rev. Hugh Salvin, a translation of Buchner's Tour along the Devil's Wall, in *Archæologia Æliana* for 1822.

(2) James Yates, F.R.S., *On the Limes Rhæticus and Limes Transrhenanus of the Roman Empire*. Memoirs chiefly illustrative of the History and Antiquities of Northumberland, i. 97-134. London, 1858. [German translation, Augsburg, 1855.]

(3) C. Roach Smith, *Collectanea Antiqua*, ii. 196; iii. 210.

(4) E. Hübner, *Der Römische Grenzwall in Deutschland*, in the *Jahrbuch des Vereins von Alterthumsfreunden in Rheinlande*, vols. lxiii. and lxvi.

(5) F. A. Maier, *Genaue Beschreibung der unter dem Namen der Teufelsmauer bekannten Römischen Landmarken*, in Band viii. of the *Denkschriften der Königl. Akademie der Wissenschaften zu München* for 1821, 1822, published in 1824; also in the *Abhandlungen der philosophischen-philologischen Classe der Königl. Bayerischen Akademie der Wissenschaften*, vol. i. 1835, pp. 1-42; vol. ii. 1838, pp. 253-298 and 753-778.

(6) E. Herzog, *Die Vermessung des Römischen Grenzwalls in seinem Laufe durch Württemberg*. Stuttgart, 1880.

(7) E. von Paulus, *Der Römische Grenzwall vom Hohenstaufen bis an den Main*. Stuttgart, 1863.

(8) C. E. Hansselmann, *Beweis wie weit der Römer Macht, &c., Schwäbisch Hall, 1763-1773*. 'Proof how far the Roman Power in its Wars with the various German Nations penetrated in the lands of Franconia.' 1768.

(9) O. Keller, *Vicus Aurelii oder Oehringen zur Zeit der Römer*, 4to. Bonn, 1871.

(10) A. Duncker, *Beiträge zur Erforschung und Geschichte des Pfahlgrabens im unteren Maingebiet und der Wetterau*. Kassel, 1879.

(11) C. Arnd, *Der Pfahlgraben nach den neuesten Forschungen und Entdeckungen*, Frankfurt am Main, 1861.

(12) A. von Cohausen and Rossel, *Das Römercastell Saalburg*. Homburg, 1878.

(13) Rossell, *Die Römische Grenzwälle im Taunus*. Strassburg, 1872.

(14) J. A. Döderlein, *Schediasma Historicum*, Impp. P. Ael. Hadriani, et M. Aur. Probi vallum et murum, &c., exhibens. Nuremberg, 1723.

3. Prof. Oehlenschläger, *Korrespondenzblatt des Gesamtvereins des deutschen Geschichts- und Alterthumsvereins*, 1880. Nos. 1 and 2. *Korrespondenzblatt der deutschen Anthropologischen Gesellschaft*, 1881. Nos. 9 and 10.

4. Buchner, *Reise auf der Teufelsmauer*. Regensburg, 1818.

5. In addition the following authorities are given by Yates:—

(1) Johann Just Winkelmann, *Beschreibung der Fürstenthümer Hessen und Hersfeld*, vol. i. Bremen, 1697, folio.

(2) Friederich Zollmann, *Charte von der Grafschaft Hanau*, 1728.

(3) Johannes Daniel Schöpflin, *Alsatia Illustrata*, vol. i. Colmar, 1751, folio.

(4) John Philip René de la Bletterie, *La Germanie de Tacite*, 1755.

(5) W. C. Buna, *Maps from Schwalbach to Butzbach*.

(6) Edward Gibbon, *Decline and Fall of the Roman Empire*, vol. i. chap. xii. p. 337. London, 1776, 4to.

(7) Elias Neuhof, *Nachricht von den Alterthümern bei Homburg*. Hanau, 1777, 12mo.

(8) Jo. Fr. Schöpferlin, *Historische Schriften*, Band ii. Nördlingen, 1787, 12mo.

(9) J. F. Knapp, *Römische Denkmale des Odenwaldes*. Heidelberg, 1813, 12mo.

(10) Von Gerning, *Die Heilquellen am Taunus*. Leipzig, 1814, 12mo.

Do. translated by John Black, published by Ackerman. London, 1820.

(11) Jo. Ph. Henr. Prescher, *Historische Blätter*. Stuttgart, 1818, 8vo.

(12) W. Dorow, *Opferstätten und Grabhügel am Rhein*. Wiesbaden, 1819, 1821, 4to.

(13) Conrad Mannert, *Geographie der Griechen und Römer*, 3rd part. *Germania*. 2nd edit., Leipzig, 1820, 8vo.

(14) Chr. G. Reichard, *Orbis Terrarum antiquus*, nos. 10 and 12. Nümb. 1822, 1824, fol.

(15) C. F. Ulrich, *Situations-karte von den Rhein- Main- und Lahn-Gegenden*. Darmstadt, 1822.

(16) Aloys W. Schreiber, *Manuel des Voyageurs sur le Rhin*. 3rd edit. Heidelberg, 1822, 12mo.

(17) E. Julius Leichtlen, *Schwaben unter den Römern*. Freiburg in Breisgau, 1825, 8vo.

(18) Friederich Creuzer, *Deutsche Schriften*. 2nd part, 2nd vol. Leipzig und Darmstadt, 1846, 8vo.

(19) Die sogenannte Teufelsmauer, in the *Jahresberichten des historischen Vereins des Rezkreises*. Nüremberg, 1830, 4to.

(20) Paul Ernest Hermann Wiener, *De Legione Romanorum Vicesima Secunda*. Darmstadt, 1830, 4to.

(21) J. N. von Raiser, *Der ober. Donau-kreis im Königreiche Bayern*, 2nd part. Augsburg, 1831, 4to.

(22) Joh. Wilh. Chr. Steiner, *Geschichte und Topographie des Maingebietes und Spessarts unter den Römern*. Darmstadt, 1834, 12mo.

(23) Ed. Paulus, über den nördlich der Donau ziehenden römischen Grenzwall, *Limes Transdanubianus*, *Teufelsmaur*, *Pfahl*, etc., in *Württembergische Jahrbücher für vaterländische Geschichte*. 1835, etc.

(24) F. G. Habel, über die *Feldzeichen des Römischen Heeres*, etc., in *Annalen des Vereins für Nassauische Alterthumskunde*, vol. ii. 3rd part, pp. 98-265. Wiesbaden, 1837, 8vo.

(25) E. Chr. Trapp, *Homburg und seine Heilquellen*. Darmstadt, 1837, 12mo.

(26) J. D. G. von Memminger, *Beschreibung von Württemberg*. Stuttgart, 1841, 8vo.

(27) Philip Dieffenbach, *Urgeschichte der Wetterau*, in *Archiv für Hessische Geschichte*, Band iv, Heft i. Darmstadt, 1843, 8vo.

(28) C. D. Vogel, Beschreibung des Herzogthums Nassau. Wiesbaden, 1843, 8vo.

(29) G. M. S. Fischer, the article 'Pfahlgraben' in Allgemeine Encyclopädie der Wissenschaften und Künste; herausg. von J. S. Ersch und J. G. Gruber, vol. xx. Leipzig, 1845, 4to.

(30) Chr. Fr. Stälin, Verzeichniss der in Württemberg gefundenen Steindenkmale. Stuttgart, 1846, 12mo.

(31) Römer, Die römische Grenzbefestigung des Taunus, in Archiv für Frankfurts Geschichte und Kunst, Heft iv, p. 86, 1847.

(32) Stumpf, Karte der Landgrafschaft Homburg, in 2 Blättern, 'Enthält sehr genau den Pfahlgraben in dem Taunus-gebirge.' Dr. Römer, in MS.

MAPS.

Bavaria (General-Stabs-Karte: 54, 47, 46, 45, 25, 17).

Württemberg (General-Stabs-Karte: 13, 12, 19, 18, 11, 10, 5, 1).

Baden (do. do. 9, 4).

Karte des Deutschen Reichs (do. 460, 483, 484, 485, 486, 505, 506, 507, 508).

A WALK ALONG THE TEUFELSMAUER AND PFAHLGRABEN.

WE started on Wednesday, August 28, 1884, from Regensburg to Kelheim by an early train, breakfasted at the Gasthof Obermayer, and then mounted up to the *Befreiungshalle* above Kelheim, erected by Ludwig I. of Bavaria, much as he erected the Walhalla near Regensburg and the Roman villa at Aschaffenburg. The *Befreiungshalle* is built somewhat on the model of the Pantheon at Rome, is surrounded on the inside by a number of marble statues of Victory, hand in hand, and supporting shields on which are inscribed the names of victories over the French. The scenery is magnificent; the building is placed on a height overlooking the Danube, which here makes a curve, and affords a splendid view towards Regensburg on the left, and on the right in the direction of Weltenburg.

From the *Befreiungshalle* it is a pretty walk of about two and a-half miles through the woods down to Kloster Weltenburg, and hither the tourist comes to cross the Danube, see the monastery, and go down in a boat through the magnificent rock scenery again to Kelheim.

Just to the east of the road down to the river, the map marks a Roman fort (*Römer Schanze*), which seems to bear some relation to another similar work on the opposite side of the river, which cuts off the promontory on which the monastery stands. So, unlike the Pfahlgraben

(as described by Cohausen), the Teufelsmauer must have had Roman settlements to the north of it.

Overhanging Weltenburg itself, on this same hill, is a well-marked mound (Grabhügel) apparently covered with green turf.

From the Kloster it is about two miles along the bank of the Danube to Haderfleck, and the path lies along the wooded cliffs, and we sometimes pass through thick masses of *Physalis Alkekengi*.

From Haderfleck a walk of about three-quarters of a mile along a meadow by the river side brings us within sight of the Hadrian's Pillar above us on the right; and we see what must be the remains of the Teufelsmauer leading up to it. It stretches from the river up to the Pillar for about one-third of a mile, marking the boundaries of the fields. It is made of loose stones heaped together, and not at all *built* in the sense that the Roman wall in Northumberland is built. *That* is made of stones hewn and faced, carefully fitted together; *this* is a mere heap of stones, rather than a wall. Where its substance is impoverished, for it seems to serve as a quarry for the neighbourhood, we can still trace its course by its stony fragments; and, about half-way between the Pillar and the Danube, it is intersected by a road which gives us an idea of its section as being *roughly* twelve feet broad by three feet high.

From the Pillar, the wall crosses the main road to Hienheim, and continues through fields and along the Hienheim Forest, until, about one mile from the main road, it crosses a green road and then comes immediately upon the remains of what was apparently a watch-tower about eighteen feet square to the south of the wall and built flush with it. This seems to have been excavated quite recently. The

stones which compose it are much thinner, and much rougher than those which are found in the towers along the Northumbrian Wall.

About half-a-mile farther on, still in the wood, at a point where it is crossed by two roads, in a slight depression, are the well-marked remains of a tower not excavated.

In this neighbourhood, in the wood, about thirteen paces to the north, seem to be traces of a ditch (*Palissadengraben*), and, about half-a-mile or more further on, are the remains of what would seem to be a watch-tower on the wall itself, and a little further on, about ten feet to the north of the wall, is a heap of stones, hollow in shape, and perhaps the remains of another tower. Just before coming to this point the wall is remarkably well marked.

[Even before this, and between this point and the last mentioned tower, I fancy there appear to be traces of yet another tower.]

Soon after leaving the point where the heap lies to the north of the wall, the wall is almost lost in thick woods, but it must have finally crossed the brook and followed the road up the hill, past an oak tree to a cross, and the remains of some old stone pillars (*Marter-säule*), where on the top of the hill several roads meet, and we see *Laimerstadt* before us on the left.

The wall now becomes almost lost, but we follow its stony track across the fields until it becomes merged in the road leading west and slightly to the north of *Hagenhüll*. It climbs the hill, and about half-a-mile east of *Hagenhüll* reaches a most commanding situation, rocks are scattered about, and you look down towards *Hagenhüll* on one side and on the other to the tower of *Altmannstein* on the west, and backwards towards the woods between this

point and Laimerstadt on the east. Here would seem to be the site of a tower, and most likely of a very important station.

The Mauer then drops for some distance, crosses the road leading to Altmannstein and rises past a wood with a cross on the left (just the place for a watch-tower) across some fields, forming a boundary-line between them, until on the Koch Berg it first skirts and then enters a wood through which its stony course may be plainly traced, until it reaches some rocky precipices which drop sharp down into the very striking valley through which the main road leads north-east to Altmannstein. We turned off thither much delighted with the picturesque village, the ruined tower of its old castle, and the fortifications behind it, and found a good lodging and a friendly welcome at the Post (Stadlers Gasthaus).

Aug. 29. The castle at Altmannstein is a fine ruin; the remains of its medieval tower, some sixty or seventy feet high, are seen for a long distance, and Maier seems to think that it may mark the site of a Roman castellum. This morning, returning to the point where last night we left the Teufelsmauer, we pick it up in fields to the right of the path which ascends the rocky gorge, almost exactly opposite to the steep rocks which we descended yesterday, and it now proceeds in a north-west direction on a high plateau. Between the fields it may be traced, being some ten or twelve feet broad, and on the highest point of the plateau there seem to be remains of a tower. From here there is a fine view away to the Castle of Altmannstein on the right, and on the left to the forests which line the horizon.

The wall is lost just before entering the wood on the west of the Messner Berg, but it would seem to have gone

down through it into the valley beneath us, leaving the little church of Sollern about a quarter of a mile to the right.

From this point for some distance it is hopelessly lost : but we took a line over the Schind Berg and down into the valley between Hinzenhausen and the mill to the left. We struck a footpath which led us across the meadows, past the saw-mill, to Ober-Sandersdorf with its very picturesque castle, and passing through the lower part of the village, with the Schloss to our left, kept the road to Schamhaupten, till the first turn to the left through a wood with the Hessel Berg to our right. We followed up this road for about one mile, bearing to the right, so as to keep always skirting the wood. Then, at a place where four ways met, we struck to the west across a meadow, and into the wood in front of us. Following a path through this wood, and proceeding slightly south of west, we came (in about three-quarters of a mile) to a stony heap (perhaps the remains of a tower), and what seems to be the stony core of the Teufelsmauer. But we must have missed a large portion of the wall from the Schamhaupten road to this point, for we did not see the big blocks of which Maier speaks, and which are presumably upon the Hessel Berg.

We continued our course, on the wall for the greater part of the way, down the slopes of the See Berg, passing, on our left before reaching the bottom of the valley, traces of two towers or buildings of some description, the latter of them being to the north of the wall. For the greater part of the way through this wood (as in the Forest of Hienheim) there is a ditch about thirteen paces to the north of the wall and parallel with it.

The wall keeps on in the same direction as before, up

the slopes of the Ochsel Berg, but we had some difficulty in finding our way. We, however, followed the ditch (Graben) for some distance until the pine wood became too thick to penetrate, and we were obliged to strike down into the valley below us to the north, which we reached near a quarry. Here we sat and ate our luncheon, and then followed along until we came to a sign-post where the Salvator Weg crosses the road to Zant. About fifty yards above this, in the wood on the left of the road to Zant, we again struck the Teufelsmauer. It is extremely well marked in the wood, and is, I should think, some fourteen or fifteen feet broad, with a slope to the north of about another fifteen feet. It continues straight through the wood for rather more than a mile (a little north of west), with the Graben at a less distance than usual to the north of it (not more than ten paces, and close to the northern slope of the wall), and it then descends, crosses the valley, and skirts the lower slopes of the Breitenhüller Berg. I may say that all through the wood, before coming to this point, is a series of what look like stone-pits, and may have been either places for tents or quarries to obtain stone for making the wall, or holes left after cutting down trees.

The wall continues along the Breitenhüller Berg, well-marked, and with the Graben to the north, for about a quarter of a mile, and just before it drops into the valley are the well-marked remains of a watch-tower on the left.

The wall now crosses the valley, and ascends the Fuchs Berg. The ascent is particularly steep, but the line is marked by stones even up this very sharp gradient. All through this wood the number of pits both to right and left of the wall is especially striking. Can they have been for tents? or quarries to obtain stone? or both?

The wall becomes lost in the thick wood, and then would seem to have crossed the meadow, possibly through Zant, for it follows the road to Dörndorf about a quarter of a mile north-west of Zant, and then branches off to the left as a footpath across fields, until, about one mile from Zant, it makes a slight turn to the north and skirts the wood called Brünst, apparently forming its northern boundary. It goes on, crossing the main road from Denkendorf to Dörndorf, where its position is marked by a pillar with an inscription, and belonging to a family of which we are destined before long to see other members.

From this point we followed the footpath to Gelbelsee, of which place Maier was Curé (Pfarrer), and about the neighbourhood of which he has taken especial care in his description¹. We were sorry that here we lost all traces of the wall, and as it was already getting late and a thunderstorm was threatening, we thought it best to make as rapid an advance as possible; so that we struck on through Gelbelsee, and the forest beyond it, coming out on the striking ruin of Schloss Kipfenberg with a magnificent view to the Michelsberg on the left, and in front over the broad valley of the Altmühl. We descended rapidly into Kipfenberg and found a lodging in the Gasthaus zur Post (Klügl).

During the whole of this time we have heard no name for the Limes Danubianus except Teufelsmauer. Also we have seen no traces of the Graben since we saw it on

¹ A straight line from the Fuchs Berg to Schloss Kipfenberg would pass just south of Zant, cut the wood of Brünst a quarter of a mile south of Winkel Bühl, go through the Wolf Galgen, and leave Gelbelsee one mile to the north. It would also pass through the Gedenkstein on the road between Dörndorf and Denkendorf, or nearly so.

the Fuchs Berg. And all through, the wall has been of the same character—a low wall or bank of loose stones without any signs of building proper.

Maier says that soon after leaving Brünst the wall passes the *Pfahlacker* and *Pfahlwiese*, and that it comes down into the valley of the Altmühl through Schloss Kipfenberg, which he thinks represents the site of a Roman station.

With reference to the question of Roman forts north of the wall, the map shows one fort about one mile north of Schamhaupten, while about two miles still further north, near Pondorf, is a *Römer Grund*, and about the same distance still further north, near Wolfsbuch, is a *Römer Schanze*, while some three miles north-west of this place, close to Paulushofen, the map places some Roman *Gräber*. All these are between the wall and the Altmühl. From which it would almost appear that here at least the Romans had taken precautions to secure that important valley.

In Kipfenberg there is a pillar similar to that on the road between Dörndorf and Denkendorf. One side of it reads, 'Der Pfahlrain, limes Danubianus, Vallum Hadriani auch Probi, später die Teufelsmauer genannt, unter Kaiser Hadrianus angelegt und unter Probus noch mehr befestigt.' The pillar was erected in 1861.

Aug. 30. Leaving Kipfenberg we crossed the bridge over the Altmühl, and turning slightly to the left, mounted the pine-clad height in front of us: and, as we turned round to look at Kipfenberg, had splendid views of the old castle above the town, and of the rocky height of the Michelsberg, on the opposite side of the valley to it, on the south. Here too is supposed to be the site of a Roman station.

Following the path into the wood, and still ascending, we strike the Teufelsmauer on our right rather on the southern side of the hill, which rises somewhat on our right. Near the summit of the hill the wall is in very good preservation, and is as high and broad as we have anywhere seen it; but we see no traces of the *Graben* to the north. On the summit of this hill, south of the wall and flush with it, is a heap of stones about twenty-one feet square, perhaps the site of a watch-tower. Both to south and north of the wall are many holes and pits. We soon come to a boundary stone on the wall, with a young plantation on the left, then another boundary stone, and a clearing; and we proceed along the road with the wall on our right. At the end of the clearing is a plantation too thick to penetrate, with a huge pit at its commencement; we cross the wall and keep it on our left, and, after a few paces from the last, find another deep hole or pit to the north of the wall, some twelve feet deep and twenty-five feet in diameter. After passing another young plantation the wall becomes less distinct, and the footpath continues on it until it reaches some open fields on the left. Just before it reaches them, there is close to the wall on the south, a well-marked heap, circular, about thirty feet in diameter; and a small pit to the north.

The wall then appears to pass through the small piece of wood on our right, separated from us by some purple tufts of heather, and then to make over the meadow in front of us across the road. It then becomes a boundary between ploughed fields, with signs of numerous disturbances of the soil above us to the south. So it passes down into the valley to the north of Pfahldorf. On the east slope of this valley, for about a quarter of a mile, it is well-marked and quite broad, being a sort of no-man's

land between the fields, and possibly augmented by contributions of stones picked off them, but it soon disappears. We followed its direction up the opposite slope of the valley, leaving Pfahldorf about half-a-mile to the left. The wall has here for the most part been ploughed up, but we found the line of it crossing the road by a hedge of old trees (maples). Here it is partly on the footpath and partly on the road, and for a field or two is quite lost, but it soon reappears as a stony grass-grown bank with a withered tree upon it, making straight, as a field-boundary, for the forest in front. Up to the forest it is extremely well-marked, and it goes on, forming its northern boundary, and is very well preserved.

Somewhere in this neighbourhood is the Pfahlbrünnchen, and presumably the *Flur-karten* will yield other names into which *Pfahl* enters as a component element. A Bauer hereabouts told me it was called Pfahlmauer or Teufelsmauer indifferently. He seemed to know all about its being a Roman boundary, and this we found to be generally the case. A little to the south-west of Pfahldorf is Pfahlspain, and some four miles to the west of it is Pollenfeld. It is usually supposed that *Pfahl* represents *palus*; and it has been concluded that the *Graben* to the north of the wall was defended with palisades.

Also it has been thought that young trees were planted and their boughs taught to interlace so as to form an almost impenetrable barrier. Yet the word *Pfahl* need not necessarily imply a descent from *palus* in the sense of *palisade*, so much as in that of *pale*.

We lunched in the wood, and then descended through it on the Mauer, across a little valley, then up over some rocks, and on with a path along side of it on the south. We catch sight of the church of Hirnstätten to the left, and

the wall becomes almost lost for a few paces, but reappears as the northern boundary of some open fields, being then well-marked. Then it crosses the road to Hirnstätten making straight for a beech copse. Here its character is that of a slope or change of level rather than of a wall, reminding one strongly of the Wansdyke above Bath on Odd-down as it makes for the Cross Keys.

In this same way it goes on until it crosses another road, and we have Hirnstätten exactly above us on our left to the south. The wall runs in the same manner as before for about half-a-mile from the beeches, until it becomes more stony in appearance, and on a height we find an elevation with a well-marked heap of stones and what look like trenches both to north and south, all of which seems to denote a station of some importance¹. Hirnstätten is behind us on the south-east, and in front of us to the right of the wall is a group of white houses (Heglohe) with black timber frames. The position of this height, and its general character, recall strongly the recollection of that between Laimerstadt and Hagénhüll.

The wall keeps on past the houses, plainly visible, and enters a wood where we recognise the loose stones among the tree-roots, and follow it for a very short distance until it rapidly descends a very steep declivity (as steep as the Fuchs Berg and nearly as rapid as that near Altmannstein) into the valley below. It crosses the valley and ascends the steep height opposite, crossing a road, just above which, on the summit, there seem to be the remains of a tower or towers to the south.

In this wood the wall consists of masses of rough stone piled together, moss-grown, and undisturbed. Here, if

¹ Also at or about this point the direction changes from west-north-west to a very little north of west.

anywhere up to this point, the wall would seem to have kept its original shape. After this magnificent piece its dimensions drop off, it is joined by a road which descends with it into the valley, where we cross the road from Altdorf to Wachenzell. If any one wishes to see a really good specimen of the Teufelsmauer, let him visit the piece we have just left on the slopes of the Biberg.

The wall now crosses the valley and mounts the opposite hill, keeping, after a while, slightly to the right of the footpath. At the top of the hill are two well-marked mounds to the south of the wall, some few feet from it. The one nearest to the wall seems to be of earth and has been cut through. The other is on the inside about ten feet by thirteen feet. It looks very much like the remains of a rifled cairn.

From this point the wall ascends slightly and continues very plain with a path beside it for about half-a-mile, when we come to a boundary stone, and then three heaps of stones flush with the wall on the south. The first is some twenty-five or more feet across, the others smaller. There also seem to be signs of surveying in this neighbourhood.

Soon after this the *Graben* reappears, thirteen paces to the north: this is the first time we have seen it since we left Kipfenberg this morning.

We now come out on the road from Emsing to Wachenzell, close to a Gedenkstein erected in 1861, and similar to those already mentioned. Here on the west are numerous pits. We leave the wood and continue along a green road which takes right into Erkertshofen. Here some of the houses are upon it. It is said to go right through the house called Dretschenhof, and the Bauers in the little inn seemed to know all about the story of a

loose brick being left for the devil to pass through when he makes his periodical survey of the wall¹.

The wall would seem to have gone north of the church, and for some distance to coincide with the road to Petersbuch. Where this road crosses that to Titting is a Gedenkstein similar to that in Kipfenberg². At this point we left the wall and dropped down to Titting to seek a lodging for the night (Gasthaus Baumann).

Aug. 31. We sent our knapsacks on to Burgsalach, and, thus lightened, left Titting to pick up the Teufelsmauer where we yesterday left it, about midway between Erkerthofen and Petersbuch. From the Gedenkstein it continues to the south of the road, first as a ridge overgrown with trees, high and stony; then as a mere slope between the fields till it crosses the road; then as a hedge overgrown with sloes, elder, and maple, but with its stony core very plain opposite to Petersbuch. Here, too, there seem to be traces of a tower.

At the next road a stone cross is erected on it. Here again the line of the Mauer is well-marked but it is much overgrown. It then crosses the road to Kahldorf (is this allied to our *Callow Hills*?), which lies about one mile to the north. Then for a quarter of a mile a field road lies on it, until once more it becomes overgrown, and with occasional gaps it proceeds across the fields in the direction of the Forest of Raitenbuch. About half-a-mile before coming to the forest, on the south side of the wall, large stones lie scattered about and there seem to be traces of some building or station. In the wall itself, too, there is an unusual heap, and about one hundred and fifty

¹ Cohausen (p. 19) tells the same story of Gundelshalm.

² Here there seems to be a change of direction (if the Ordnance map is correct) to the head of the valley to Titting.

yards further on are large stones again, with signs of building. This must have been a very large building. The wall is much overgrown until it enters the forest and has on the south of it a hollow, about thirty or forty feet square, perhaps a disused quarry.

About one hundred yards from the forest it suddenly changes its direction to the north-west¹: just in the corner are large blocks of stone to the north, and also as it enters the forest. On entering are depressions to the north, and between this point and the open clearing, where a road crosses, we notice several depressions both to north and south, and what may be the remains of a tower on the wall².

In about half-a-mile comes another clearing, and a sort of heath where the stones have been built into a rough wall to bound a meadow, and then in about fifty yards we come upon the remains of a watch-tower south of the wall and flush with it, about eighteen feet square and about five feet high, moss-grown, and apparently recently thrown down in part.

Close to it, on the west, is a hollow about fifteen feet in diameter, and in fact here are many hollows. In about two or three hundred yards the wood ceases on the right and there is an open meadow across which we see the village of Reut-am-Wald. In about fifty yards there are fields also to the left, and just about this point the ground is much disturbed—possibly these are pits to quarry stone for the wall.

At the end of the fields the wall enters the forest again

¹ This is not quite according to the Ordnance map; but it would seem that a considerable part of the forest must have been cleared since the map was made.

² Here too the change of direction is accompanied with the remains of important buildings.

and the ground rises. We pass many hollows on the left and continue on the top of the Mauer, reaching, at about its highest point (for after this the ground begins to fall away slightly to the west), the remains of another tower of about the same size as the last, but thickly overgrown with young trees. Here the ground is much broken and there are many gaps in the wall, until we finally come to a clearing and a boundary stone. We descend until the wood ceases on the right and we see Raitenbuch to the north. About two hundred yards from the end of the wood, and west of it, *may* be the remains of another tower.

The wall in about one hundred yards leaves the wood and becomes a field-road for some distance (half-a-mile), passing many pits on the south, until it crosses the road to Raitenbuch, then a crucifix, and then a Calvary, with Raitenbuch immediately above us. We keep on past the tile-sheds (*Ziegelhütte*), and for about two miles follow the line of wall, which remains for the most part well developed on our left.

At the top of the hill, looking north to Burgsalach, is a heap which looks like the remains of a watch-tower. We descend slightly from this point in the line of the wall which is worn into a mere road, until we reach the road to Burgsalach. Thither we turn to eat our luncheon, and to recover our knapsacks which we had sent on from Titting in the morning.

Perhaps the *Burg* in Burgsalach may point to a Roman station about here ¹. At any rate there are Roman remains in the neighbourhood: and the Roman road (*Hunds-rücken*) is nearer to us (only about one mile off on the south) than it has been at any point since we left the

¹ There is all the more reason to suppose that there was one, because of the slight change in the direction of the wall.

Danube. The way that it approaches the line of wall at this point and at its eastern end is striking, and reminds one of the way that the *vallum* in Northumberland leaves and approaches the *mur*¹. Can the intention have been in this case too to have erected a sort of huge fortified camp, closed or nearly closed at both ends, between a quite hostile and a semi-subdued country?

May, again, the change of name, Pfahl instead of Teufelsmauer, indicate a change in the nature of the work, or a diversity of time in its construction?

Resuming the line of the Pfahl or Mauer where we left it near Burgsalach, we find that it continues sometimes as a road and sometimes as a hedge, though sometimes almost entirely quarried away, past Indernbuch; and we see the fortress of Wülzburg strikingly prominent away on the left, and a single tree (die hohe Linde) on the brow of the hill, from which there must be a splendid view.

When just about level with this tree we enter the wood of Rohrbach, and the wall almost immediately descends a very steep declivity strewn with scattered stones. It is then lost but its line crosses a meadow, north-west into a beech wood, where its course becomes plain again. Then it is much overgrown, and it emerges from the woods as a mere ridge across arable fields with Rohrbach on the north. A little in front of us is Anhof. Just beyond Anhof to the south, the line of it crosses the road, and we lose it in a wood, so completely that we are obliged to skirt round the wood. We cross the fields, follow a damp meadow, cross the Felchbach, and then ascend on the line of the wall almost opposite to Fügenstall. We keep on until we cross the main road, which has a monument

¹ For about four miles or more the Roman road is here parallel with the Teufelsmauer and only about a mile distant from it.

upon it, which speaks of the 'Vallalum (*sic*) Hadriani et postea vallum Probi.' From Rohrbach to this point and onward, the line of wall has been often hard to find, and is frequently ploughed up; it sometimes exists as a mere hedgerow, but its line can generally be traced as a field boundary. It then takes the line of road between Oberndorf and Ottmansfelden, and descends into the valley, in which is the road from Ellingen to Pleinfeld, where its line is marked by a Gedenkstein (Vallatum Hadriani et postea Vallum Probi circa annum 279 p.c. a Romanis extructum).

We walked on to Pleinfeld, and found comfortable quarters at the Gasthof zum Stern.

In this district, and especially about Weissenburg, I notice what may be of interest to Mr. Seebohm, if he has not already noticed it, as I think he has. Names in *-ingen* and in *-heim* appear to be much more frequent to the south of the wall than to the north. The inference would be that the *heims* are the successors of Roman or quasi-Roman settlements.

In the Forest of Raitenbuch the wall is extremely well preserved. Maier thinks that nowhere is it more majestic, but I cannot help thinking that the portion of it in the forest on the slopes of the Biberg was more striking and better preserved.

In the case of one of the towers (I believe the *first* one in the Forest of Raitenbuch) the surrounding trench was extremely noticeable and well preserved.

Sept. 1. We left Pleinfeld by the road to Ellingen, and resuming the line of Mauer at the Gedenkstein, follow its direction, for we cannot see it. We cross a field from the Gedenkstein, enter a wood, keeping slightly north of west, take the first field-road to the left for about thirty or forty

yards, and then turn up to the right into the wood. The wall almost immediately appears, ascending the hill, in the shape of an earth-wall with its southern slope well developed.

A little further on its stony nature becomes more plain: there are several boundary stones close to it on the right, and on the summit are perhaps traces of a tower. It then descends over an open space, being first of all lost for about one hundred yards, then becoming plainly visible and composed of lumps of a reddish sandstone. Here it has evidently been recently disturbed. It descends and re-enters the wood, but is now full of gaps and much broken, keeping, however, the same general direction, and finally dropping down a short but sharp declivity into the valley of the Schwäbische Rezat, which we cross by the mill of Lauterbrunn. The line of the wall, however, takes through a small copse, across the railway¹, then through a wood and across fields, at the top of which we finally come upon it. It skirts another wood on the left, and for about half-a-mile the field-road seems to be upon it with open fields on the right. Near the end of this open piece, and about one hundred and fifty yards from the next wood, and on the crest of the hill, are the remains of a tower about thirty feet square². Maier seems to think there are two.

This point must be nearly a mile west of the railway. The line of wall then skirts a wood on the right, and crosses

¹ At this point Cohausen's personal inspection ceases; he and his friends having started from Gunzenhausen, and here turned off to Pleinfeld (pp. 22, 23).

² Cohausen (p. 22) thinks this is a group like that on the Pfofelder Espa (see post), and places it at a distance of 1800 paces east of the Hoch Strasse. He says it is sixty-three paces in circumference.

a wood with houses (Feldhütte) below it : but about this point we struck too much to the south, lost our line, and were glad to find our way to the Gasthaus (Wächter) at Dorschbrunn.

After some refreshment, we proceeded north-west about a mile from Dorschbrunn along the road, then struck up into the woods, coming out on the west slope of the Mischl Berg. Here, still keeping on past fields and hop-gardens, we came on the line of the Pfahl marking the boundaries of the fields, and recognisable by its core of stones. In the Wood of Horlerloh it becomes quite plain again, pointing just north of west. At the highest point of this, for the wood descends slightly on both sides, are evident remains of a tower of about the usual size¹. The line of wall keeps the same direction until it leaves the wood and cuts the roads to Thannhausen and Abzberg, near the sign-post.

It then comes out on an open meadow or heath, and about a quarter of a mile from the end of the wood is a large oak tree with disturbances of the ground, and a splendid position and view which would mark this for a station².

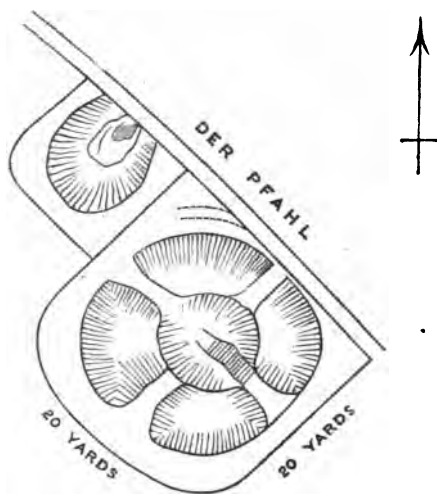
In rather more than half-a-mile the wall enters the Wood of Fichtel. At first the road is on it, it then leaves it, and a footpath accompanies the wall to the south of it until it leaves the wood and makes along an open heath³.

¹ According to Cohausen, p. 21, 670 paces east of the road to Thannhausen, and therefore about 900 paces from the oak-tree which follows.

² Espa of Riedern. It is apparently here that Cohausen is inclined to place a similar grouping to that which he finds on the Pfofelder Espa ; the point being 225 paces west of the wood of Horlerloh (*sic*), p. 21.

³ Pfofelder Espa.

with the wood on the right. About thirty yards from the end of the wood are traces of a tower¹. It still keeps in the same direction with some score of oaks on the left. At the end of the wood on the right, close by a boundary stone, are some striking remains—not only the ordinary watch-tower, but apparently of some larger building immediately adjoining it on the east². Of this additional building the sides measure each about twenty-one paces—perhaps twenty yards. Inside this is a well-marked



heap, circular, and partly excavated (though not recently). I should judge the heap to be twenty-five or thirty feet in diameter. Moreover it seems to be connected on four

¹ Apparently referred to by Cohausen, p. 21, who says that the footpath from Riedern to Langlau and Rehebuhl here crosses the line of wall.

² Pfofelder Espa, 4000 paces from Gundeshalm (Cohausen, p. 20).

sides with the outer wall or circumference, something in the manner of the spokes of a wheel. Annexed is a rough diagram. This too is at a point where the ground descends on both sides and there is a splendid view, and I am inclined to think that we have here a mile-castle and a watch-tower side by side.

At almost exactly five hundred paces from this point, in the hollow, we cross the road to Pfofeld (Pfahlfeld), so that for two reasons we may expect a tower at this point:—viz. the distance, and the proximity of a road. I do not, however, see any sure traces of one. From the tower above to this point the wall has been a mere road, though plain enough; and now it goes on as a hedge between the fields, much overgrown, and bearing more to the south. Now cultivation has almost entirely effaced the Pfahl, but its line may be traced as a boundary, and in 500 paces I again come to an elevation in a commanding situation where there may well have been a tower. The line then descends and crosses the road to Pfofeld. From this point it has been ploughed up, but continuing in what should be the line of it, I strike it on the hill above Gundelshalm, and see its course stretching plainly through that village and up the hill with Frickenfelden on the right. It passes through Gundelshalm and keeps the road to Frickenfelden as far as the sign-post, then is lost, but in about two or three hundred yards reappears as a bank between fields, making for the wood. In the Wood of Burgstall I must have struck too much to the north and pursued too closely the northern slopes of the hill, but bending round, I came into the line, as I supposed (though wrongly, as I am told,) of the Pfahl, for in a short distance I came to a pillar on the left inscribed with the words 'Castrum Romanum' in golden letters, and in

a very strong and prominent position.¹ But I missed the so-called Druid's Grave and the Pentagram, and descended into the valley to Gunzenhausen, where our hotel (zur Post) was full of soldiers out for the manœuvres.

Is the name of *Burgstall* due to its being the site of a Roman camp?

Sept. 2. We leave Gunzenhausen, passing the Gedenkstein on the line of the wall, the inscription on which is given by Cohausen. We leave the town by a bridge over the Altmühl (on which also Kipfenberg stands), and turn by a picturesque old stone cross up a path which leads under the railway. Here the line of the Teufelsmauer is soon seen making in the direction of Unterhambach. It divides the fields and there is a field-road upon it. It goes on in this way for about two miles from Gunzenhausen, and then enters a wood. At the end of the wood, helped by boundary stones and the divisions between the fields, we infer that it must leave Unterhambach on the right and make straight up the hill in front of us, in the same direction as before. After crossing the Hambach, a mere ditch, it is a mere ridge between fields. It ascends and forms the northern boundary of the next wood for about two hundred yards, and then plunges into it. Just at this point, where the ground ceases to rise and begins to fall away, there appears to be traces of a station (perhaps a mile-castle). In the wood itself, some two hundred paces further west and about twelve yards south of the wall (though we may perhaps have mistaken the line of it), is a round heap, perhaps the remains of a watch-tower.

Then it descends by a clearing, then some more woods, and its course is marked by boundary stones, while every

¹ Schlossbuck (Cohausen, p. 19) 3000 paces from Gunzenhausen.

now and then there are good traces of the Mauer itself. It then emerges from the wood, and becomes identical with the road to Klein Lellenfeld. Soon it enters a wood and keeps in it, slightly to the left of the road. As it crosses the road there are traces of what may be a tower. Then it crosses another wider road, and goes on still through the wood. Then it ascends, leaves the wood, goes through ploughed fields, about one mile east of Klein Lellenfeld, and then becomes identical with the road into that village. Up to this point the engineer seems to have been guided by the Burgstall above Gunzenhausen, for whenever we turn to look back we see that height in a perfectly straight line with us, and it is the most prominent height in that direction. But from Klein Lellenfeld westwards the direction changes to a little more south of west, and we imagine that the engineer must have been now guided by the conspicuous height of the Hessel Berg, and have directed his line towards its northern slopes or the heights in its vicinity.

After a rest at Klein Lellenfeld, we resume what we suppose to be the line of the Mauer (no longer the Pfahl) about a quarter of a mile outside the village: but we were mistaken, and finding ourselves too near the Eybburg, were obliged to strike down through a wood into the plain, where we once more came across traces of it. It appears to cross the fields as a boundary a little south of west, then to cross a ditch some six feet broad, and then over a newly-mown meadow, where we thought we could discover its line in the darker colour of the grass, and so on into the wood. In this wood it should skirt the south end of the Markgrafen Weiher, but we lost the line, and came out about fifty paces to the north of a clearing, in which was a heap about twenty-five yards square, and a wooden

post upon it, bearing the inscription 'Reste der Teufelsmauer und eines römischen Vertheidigungsthurmes.' We must then once more have got wrong, for going through the wood south of west, we crossed another road, then a wood, then a clearing, and then came out on the main road from Dennenlohe with telegraph posts along it. Here we found that we had wandered too far to the south, so, turning northwards along the road, we came in two or three hundred yards to a post on the line of the Teufelsmauer bearing a long inscription, indicating the course of the wall as far as Cologne. It began: 'Römische Fortificationslinie, vallum Romanum, genannt Teufelsmauer, war 7 Fuss breit und 18 Fuss hoch. Grunder Kaiser Hadrian 173 nach Chr. Geb. Vollender Kais. Probus, 276 n. Chr. Geb.' This was erected June 26, 1838. Whether the other information is trustworthy I am not prepared to say, but there is no doubt that the height of the wall is over-estimated.

Taking the road to the Hammerschmiede, we find the wall about one hundred yards to the south of it in the wood on our left, very well developed and running slightly south of west; and I imagine that once or twice I caught sight of traces of the *Graben* about thirteen paces to the north. This, however, may be only fancy.

The wall comes out by the Mill Dam (Kreut Weiher), and must have gone through it. We continue on past the Hammerschmiede, across the road to Dambach, up a green road by an old disused quarry, into a wood, and past another Dam (? Pfahlweiher).

Here too we missed the line of the Teufelsmauer, and striking about west-south-west through the wood, came out upon the road with the magnificent Hessel Berg in front of us, with the village of Ehingen below it. Here

we rested for the night (zur Sonne), and, it being the anniversary of Sedan, there was a bonfire on the Hessel Berg and a torchlight procession.

For the second time to-day we are reminded of the Thirty Years' War. There is a memorial of Gustavus Adolphus on the Hessel Berg (Gustavs Ruhe), and near Gross Lellenfeld are said to be the remains of a Swedish fort.

The change of direction in the Mauer seems to begin at the Markgrafen Weiher, below Klein Lellenfeld.

Sept. 3. Leaving Ehingen, we struck up the road and across fields north-west for about a mile and a-half: and with Beyerberg about the same distance from us on the north, we come upon the line of the Mauer, which we see stretching from the east from the woods which we left last night, and making some two or three miles across the valley as a green field-road to the point where we now are. The direction of the wall is a little south of west. What may be the true direction of the wall just here I cannot say. We continue, as before, straight on, following a line of demarcation in the fields and crossing the road to Beyerberg about half-a-mile north of the hamlet of Grüb. Then we enter a pine wood (die Hüll), still in the same line, but are not sure that we can find it. We still keep on, leaving Dühren about a quarter of a mile below us, but we failed to strike the line of the Mauer through the wood, where the Ordnance map shows it turning sharply to south-south-west in the direction of Weiltingen. On emerging from the wood, however, we were fortunate enough to discover its line issuing from the wood, with Gelshofen about a mile to the south-west. Here it is a field-road, and makes south-south-west to the Gelsmühle just north of Unter Michelbach. It must have crossed the stream (Sulzach), if anything, just above this, and then up

and over a hill, among fields, and down again almost through the Neumühle on the road between Ober and Unter Michelbach : then again up over fields, where it is quite lost till it crosses the main road from Illenschwang to Wittelshofen. About this point, on or near the main road, is a fine position for a station, but I do not know that there are any traces of one. Here we found a field-road which took us down in an almost perfectly straight line through Wörnitzhofen to Weiltingen, which we reached through pleasant meadows and by a bridge over the Wörnitz.

After a slight lunch at the clean hostelry (Goldene Hirsch), we pushed on in the direction of Wilburgstetten. About one mile out of Weiltingen, and barely a quarter of a mile to the south of the road, are the remains of a Roman camp (Römer Schanze). It is square ; its northern face measured one hundred and forty-two paces, and the slope of the northern wall was about eighteen feet. From it we struck down north-west towards the road, where about opposite to the Neumühle the river makes a bend, and a path leaves the road and continues through the wood representing the line of the Teufelsmauer. When on this line, about which there could be no doubt, we looked back, and found that it pointed straight for the central summit of the Hessel Berg. Hence we conjecture that this portion of the wall must have been made from west to east, with this as a guiding point ; and that possibly the angles made round the Hessel Berg may be due to two engineers working from different sides, both making it their point, and when approaching one another modifying their line so as to take in the part from Dühren to Weiltingen. I also notice that the angle about Dühren is about equal to the angle about Weiltingen. Here, in the

Wood of Weiltingen, the direction is again south of west : the wall becomes quite plain again, and there are boundary stones and a footpath on it. We come to a road where the ground slopes both ways, and here there seem to be the remains of a tower, then more wood, then across a road, and then we take a footpath across the fields, and the shortest course we can to the railway station of Wilburgstetten.

The line of the Mauer would, if continued, take between Wilburgstetten and Wolfsbühl by the New Oil-mill, and would cut the railway about a quarter of a mile south of the station. The last portion of the wall in the Forest of Weiltingen is by far the best we have seen to-day, for with this exception the line has been hard to discover.

We were fortunate enough to catch a train to Dinkelsbühl, whither we proceeded to regain our heavy luggage, and to rest. Nothing could be more fortunate than the chance which led us to make a resting-place of that extremely quiet and picturesque town, with its old wall and moat, its curious towers, and its high-gabled houses and quaint streets, which happily as yet no reformer has had occasion to disturb—Dinkelsbühl (Goldene Rose).

We spent Sept. 4 resting at Dinkelsbühl, and on Sept. 5 took train to Wilburgstetten, and picked up the line of the wall just south and west of the station. It crosses a field, and then cuts the main road to Dinkelsbühl at a point marked by a Gedenkstein erected in 1861, and similar to that at Kipfenberg. Looking back, we see that the line of the wall must have made through the oil-mill east of the railway, and over the woods to the central peak of the Hessel Berg. Continuing our course from the Gedenkstein, we cross some mossy undergrowth into a wood, then cross a road, at which point there seem to be traces

of what I should suppose to be a mile-castle (a square whose side is twenty-three paces). We pass through a strip of wood again, and come out between the two ponds of the Höllmühle, skirting the northern end of the lower one. Here the wall is very well marked at first: we cross two wood-roads, then a road, then more wood. The line takes out into the line of a field-road, which comes out into the main-road, and we see Mönchsroth about one mile from us to the north-west. Opposite this field-road, in the main road, is a boundary stone. We cross the main road, skirt a very small corner of thick wood, and pass through a meadow, so as to regain our former line, and we then find the wall forming the south boundary of the meadow, and proceeding in the same direction as before. The stones in it are quite plain. At the end of this meadow it crosses a road and forms the boundary of the wood. Almost close to this road, and on the west side of it, are evident traces of what I suppose to be a mile-castle. The side of the square is twenty-three paces, the corners seem to have been rounded, the trench on the interior is very plain, and there is a circular heap in the middle; the diameter of which I cannot state exactly, but which may be twenty-five feet. This tower or castle is, as near as we can guess, about a mile from the one in the neighbourhood of the Weiher. We then cross a clearing, through which the course of the wall is plain, take to the wood again, and then crossing a meadow, come out into a main road about midway between two bends which it there makes. From this point we passed through woods, and bearing too much south lost the right direction, and came out over the Württemberg and Bavarian border, slightly to the north of the little village of Eck.

From this point we thought it best to make for the

frontier, where the boundary line between the two kingdoms makes an intruding angle between Eckand Strambach. Then rounding a wood just south of the Katzenbach, we come on what is evidently the continuation of the line we have been following through Bavaria, and in the map at this point bears the name *Heerstrasse*. It continues as a field-road some twelve or fourteen feet wide, in a direction south of west, is lost across some meadows, and then emerges in a hard road through some houses, with Dambach about one hundred and fifty yards to the right. We keep up the fields in its direction, but all traces of it have vanished except an occasional stone, and ascending the somewhat steep hill come out on a striking eminence with the Berg Capelle immediately beneath us on the right, and Stödtlen beyond it to the north-west. Oberzell is immediately above us on the left. Here a road crosses, the ground is much disturbed, and the position would be an excellent one for a station, but I do not know that any signs of one have been found¹.

About one hundred yards to the north of Oberzell and just below it, the line of the Mauer is quite plain as a balk or ridge in the meadows; it continues in the same line, crosses a road, and becomes lost among the arable fields, but is plain again in the meadows between Freyhof and Weiler an der Eck. Here I imagine it must form the north boundary of the wood near Freyhof; but in endeavouring to avoid a mistake near Freyhof we lost our direction, and came out at Halheim, where we could see the line of the Teufelsmauer coming down into the village

¹ Also the wall seems here slightly to change its direction from west-south-west to south-west by west,—another argument for a station. Such is the case in the Taunus, and we suppose also in Bavaria, near Petersbuch.

from the north-east. A large tree seemed to be on its line, and it appeared as an overgrown hedge.

From Halheim to Pfahlheim the line of road seems to be upon it. At Pfahlheim we were told some remains had been found¹.

Leaving Pfahlheim, we notice that the ground is curiously formed just west of the brook, on the side of the hill. For about one mile the road seems to be on the line of the Teufelsmauer, and then to go a little too much north of it through Erpfenthal. The true line must cross the stream, make through the copse on the west slope of the Osterberg, where near the bridge is a striking green mound now nearly quarried away. This could hardly have been left unfortified, but in no very distant time there will be no sign of any hill at all. Here a stony road, which represents the line of the Mauer, runs up the fields to the west, and the wall has a larger slope to the north than I remember to have seen in Bavaria. It is overgrown with bushes, and soon falls away and becomes a mere field boundary with a slight slope, making straight for the north end of the village of Röhlingen, and also for a conspicuous hill in the western distance, which we find is the Scheuelberg just south-west of Heubach. Then it becomes stony, and loses itself in the meadows just east of the brook. The line seems to cross the brook, and going over the fields to reach the main road about one hundred yards east of the village. The line goes right through Röhlingen, and at the end of it keeps on, allowing the Ellwangen road to branch off to the north-west. Here it

¹ The villages of Halheim, Pfahlheim, Erpfenthal, Röhlingen are all, roughly speaking, equidistant. It is not too much to suppose that they represent the site of Roman stations, and in that case, there would be room for another station between Halheim and the hill above the Berg Kapelle.

is lost in the fields and meadows for about half-a-mile, but on crossing a wooden bridge in the valley we see it ascending in front of us. Here it is at first a mere slope to the south; then it has bushes and a footpath on it, much like a field-road. It is about ten or twelve feet wide, and resembles the Heerstrasse which we encountered on crossing the Württemberg border. In one place it is nearly four feet high. We then cross a road, with a cross, and it being a high point with a fine view, reflect that it would be an excellent position for a station. Then we lose it in the fields. It ascends the next hill as a road, then enters a wood still in the same direction. In the wood it is plain, and where a road crosses there are remains of a tower. Here the wall is well-marked with a slope to the south. We come out of the wood and look down over Dalkingen. Somewhere in this neighbourhood the wall changes its direction to the west towards Schwabsberg¹. How this is exactly done I cannot say: we struck a field-path which took us above Dalkingen, on a line which looked very much like that of the Pfahl, by a height overlooking the river Jagst (where a station may perhaps have been) to Schwabsberg. Here we caught the train, and made our way to Ellwangen (Goldene Adler), where we spent the night.

Sept. 6. We took train back to Schwabsberg, and crossing the railway south of the station, we find the line of the Teufelsmauer about a quarter of a mile south-west of it in the fields, with a path on it for a short distance. It is not very plain, and in about three hundred yards crosses

¹ Perhaps it is near the conspicuous tree in the line of the Mauer between Dalkingen and the wood above it. The object seems to have been to keep the high ground above Dalkingen, which looks very marshy.

the main road between Schwabsberg and Buch. It then takes through a small wood, from which we emerge with meadows on our left and the wall on our right. The direction is plain, and the Mauer appears to be a loose stone wall as we have been accustomed to see it in Bavaria. Soon a green road some twelve feet wide is upon it, and we are not sure whether the Mauer is on our right or whether we are mistaking the bank which bounds the wood for it. We cross a road (leading into the Obermudholz), and in about one hundred and fifty yards enter a wood in front of us. Here it descends, crosses the valley and ascends, enters a wood, then comes out with a wood on the right and meadows on the left, till it finally comes out on the road between Schwenningen and Buch by a sign-post, and a post marking the official district jurisdiction. This stretch, for some three or four hundred yards, is the best preserved piece of wall that we have yet seen in Württemberg. It is ten or twelve feet broad, and four feet high at least, and in this particular spot cannot be mistaken for a road or for a wood-boundary. It is unmistakably a wall of the same kind as that which we have followed through Bavaria. In the neighbourhood of Buch, which is perhaps three-quarters of a mile from us on the south-east, remains have been found, and the map marks '*Ruinen*,' which I suppose are Roman.

After crossing the road by the sign-post the wall vanishes, but we follow the direction of it down over the fields, and across a brook with Mittel Lengenfeld a quarter of a mile on our right, and then up over the fields on the other side. Here we follow the line, which is a mere slope, and it seems to have made a very slight change in its direction. Then up over the meadows,

with Unter Lengensfeld close on the right, and at the top we find that it points—quite rightly—for the centre of the Scheuelberg. It here merges in a field-road, and we lose it for some distance, following the direction, but finding no traces of it for some mile or more. We follow still in the same line crossing the road between Hüttlingen and Sulzdorf and leaving Hüttlingen to the left: here there is a deep chasm close to the road on the west, and the line of the Mauer (if it went straight) would take down a steep hill, across the Kocher near the mill, and through meadows up another very steep hill to the south. The scenery here is very fine, with rocky pine-clad hills to our left, and the picturesque Schloss of Wied Alfingen on the right.

At the top of the ascent above the mill we again strike the line of the Mauer, coming as a footpath over the meadows, slightly raised and easily recognisable, and making as straight as an arrow for the centre of the Scheuelberg. Here soon there is a field-road upon it. Then for about two miles it is plainly visible at intervals, but is often ploughed up. Yet about the line of it there cannot be any doubt.

We proceed, leaving Onatsfeld on the left, and in about half-a-mile we drop down into Treppach to take our lunch in the clean little inn.

Leaving Treppach, we ascend, and endeavour to strike the line of the wall, but are not certain about it in the woods. We come out, however, by the Boeckshafhaus, which is on the line of it, and cross the main road with Hammerstadt half-a-mile to the left, and Tanenhof and Degenhof above us on the right.

We ascend the hill in front of us, then drop across another road, and rise again across the fields, leaving the Huttenhöfe on our left. Still going up, we cross the road

from Dewangen to Essingen. Hereabouts the composition of the wall begins to get somewhat slaty, which, however, is not the nature of the surrounding soil. The line still rises, making straight for the centre of the Scheuelberg. We proceed until we reach a ridge looking down over Mögglingen into the valley of the Rems, and we have a little village on our left, with the conspicuous Kolbenberg beyond it; and we stand on a field-road which crosses in front of us and joins the Hochstrasse on our right. Here we are at fault, and see no more traces of the line which has guided us so far. Probably the line changes direction on this high ground, and perhaps the vicinity of Aalen (*Aquileia*), about two miles and a-half off to the east, is a sufficient reason to account for it.

We took the line of the Hochstrasse—supposed to be a Roman road—as far as Freudenhöfle, then left it to drop down through the wood to Sixenhof, and so to Mögglingen and Unter-Böbingen, where we caught the train to Gmünd (Rad), there to spend the night and following day.

Sept. 7. We rested at Gmünd, but it was a rest of mind rather than of body, for we made an expedition to the striking height of Hohenstaufen, the interest of which is, however, of a different nature from that of the wall we have been following and are yet to follow.

Sept. 8. Leaving Gmünd, and despairing of being able to find any satisfactory traces of the wall in this neighbourhood, we walked on through Muthlangen, Pfersbach, Adelstetten and Alfdorf to Pfahlbronn. From Alfdorf to Pfahlbronn the main road is on the line of the Hochstrasse, which I suppose is so named from its course lying over the high table-land above the valley of the Rems.

The day was wet and miserable, but after lunch at Pfahlbronn we dropped down through the fields into the

woods to see what we could of that portion of the Pfahlgraben (for so we must now call it) which lies between Lorch and Pfahlbronn. The first turning to the left at the west end of Pfahlbronn, by the Post Office and a large tree, brings out into a field road, by the side of which we soon see a bank similar to that which we have seen in Bavaria, on the left, running somewhat in the direction (as we should suppose) of the Pfahlgraben. As it neared the wood it became still plainer, larger, broader, and higher, and we could see that it was a bank of earth and not a wall of stones. In the thick wood it was difficult to be sure that we were on the exact line of it, but we followed it down for some two miles until we could have no doubt about the matter, and then retraced our steps and followed it up again to Pfahlbronn.

The best-preserved portion which we saw was about half-way between Brech and Lorch, just south of where a road crosses it. About one hundred yards south of this road the Pfahlgraben is a huge bank or wall of earth, in places eight or ten feet high and twenty-five or thirty feet broad: it has on the east side of it a ditch, which must be fifteen or twenty feet wide. This is altogether a different affair from the Bavarian wall: that is of stone, this is of earth; the ditch of that is small and distant; the ditch of this is large, and close to it; and the scale on which that is constructed is only about one-third of the magnitude of this. And it most resembles the wall of Antoninus (Graham's Dike) in Scotland. Starting from the point described, and crossing the road just mentioned, the wall runs a little east of north; about fifty or sixty yards after crossing the road it bends north-north-east. About four hundred or five hundred paces north of this, up a steep hill, are the remains of a tower. It must have been on the

west side of the wall. It has been excavated, and is about sixteen feet square (the size of the tower we first saw in the Forest of Hienheim), and has fallen in a ruined heap which measures about sixty-five paces in circumference. I mention this because it is the only instance we have had for establishing any sort of relation between the magnitude of the ruin and the size of the building it may be expected to contain. Within the next five hundred paces¹ I imagine there would be good sites for two more towers, but the wood was so much overgrown, there were so many cross-paths, and it was so wet, that it was very difficult to come to any satisfactory conclusion. The line comes out plainly in a direction east of north in the fields through which we came from Pfahlbronn, and if the line was the same as that through the wood, it must have come out into the road through some houses about one hundred yards west of the Post Office, in which case the bank by the roadside to which I referred would not represent its true course.

The main road west from Pfahlbronn must represent very nearly the line of the Pfahlgraben; at first there are no traces of it, but about one mile out of the village it becomes quite plain as a ridge in the fields to the left of the road, and so it continues for about two miles west of Pfahlbronn, recognisable by the high bank to the left of the road.

About Pfahlbronn the line makes two short turns to the west-north-west of about half-a-mile, separated by a stretch of about one mile due west. At the end of the second of these turns, midway between two tall lime trees and Haagshof, quite on the level, the Pfahl turns off, slightly to the west of north, for its long journey in a perfectly straight line to the banks of the Main at Miltenberg.

¹ Near the Bemberlensstein.

It crosses the road, is plainly visible down some meadows, then a field-road is on it for about fifty yards, then it is more or less worn away, and becomes a mere track up to the wood. In the wood it is not remarkably well preserved, and then it passes through a meadow for about sixty yards, re-enters the wood, and on crossing a road we find a heap to the left, not excavated, and probably the remains of a tower. We then get out into a swampy meadow, cross a small brook, and mounting towards the next wood, have Breitenfürst to the west of us. In this next wood we got lost, and had to make the best of our way to Welzheim (Lamm).

Sept. 9. We left Welzheim by the main road to Murrhardt, and in about half-a-mile turned off to the right along a field-road. Some three or four hundred yards from the main road we struck up on to the fields and turned north. We soon found the line of the Pfahlgraben, represented by a field-road, going for a long distance almost perfectly straight in a direction slightly west of north. We mounted the hill, and dropped down with Seeboldsweller about a quarter of a mile above us on the west. Here, for about two hundred and fifty yards, the line is well-marked with the slope to the east. Then a pond was in the fosse; then we crossed a meadow, and then kept up over the fields where it has been ploughed up; then still onwards, tracing a mere slope to the east. Soon it becomes four feet high; then may be traced over fields. Then comes a dip, and then a rise to Eckartsweiler. Here it is plain in the orchards; a piece of road makes a semicircle round them. Then the road goes forward with the dike on the left of it. Then the line crosses a road, and is quite plain in the fields, till we come to a wood on the right. Soon the eastern slope on the

side of the wood becomes well-marked, more than fifteen feet long, and the width of ditch must be more than twenty feet. In this place it reminds me of *Grim's Ditch* in Ditchley Park, Oxfordshire, known as the Lovers' Walk. As it leaves the wood it crosses a road, and takes down a meadow, where it is particularly well-marked, the eastern slope being sometimes, I should suppose, twenty feet, and it is here planted with two rows of apple-trees. As we cross a brook, we have Gausmannsweiler above us on the left. The line keeps up the meadows; it has been nearly ploughed away, but there is a pond in the ditch. It dips a little, and then disappears; then rises, but there is no trace until it crosses the main road to Welzheim, and enters the wood on the left. At this point, where a road crosses, I imagine that there are traces of a tower: the outer circumference of the mound is about forty-five paces. It soon drops down a steep declivity, where the wood is too thick to follow it, and we have to strike back to the road again.

Resuming it in the wood, about half-a-mile west of Entenhof, it must be eight feet high and thirty feet wide at bottom, with a ditch to the east some twenty-five feet across. Then it crosses a road which runs roughly east and west, and continues through the wood. Here it is very well-marked indeed. Then it drops down, among some fine, straight, faultless firs, being well-marked. Soon there comes a chasm, with a brook, then another chasm, then a meadow, and we cross a road, with Weidenhof a quarter of a mile to the east. Here we lost our way, and were obliged to strike out into the main road, which we did where four ways met, about a quarter of a mile west of the point where it crosses the road. Here, having recovered the line, we sat and ate our luncheon, and after-

wards followed it for some distance across two rocky gorges, and then down into the deep, steep, and rocky valley of the Murr. Here again we got lost, and came out just south-west of Klingen, where we were more than once given instructions about the line of the *Schweingraben*, as it is called in this neighbourhood. Some little distance further, however, in the vicinity of Käsbach, the name seemed to be unknown. Here we gave up our attempts to discover the line, which is not even marked in the Ordnance map, and made the best of our way through most wild and picturesque scenery, rocks, pine-woods, and confused heights, to the beautifully-situated town of Murrhardt (Stern).

For the first part of the way to-day the striking, almost conical height of Hohenstaufen, seemed to be the regulating point of the line, although it would not be correct to say that it made *exactly* for it.

The Roman town of Murrhardt was on the south-east; Roman pavements, vessels, coins, &c. have been found, and inscriptions, showing that the twenty-fourth cohort of volunteers was here stationed¹.

Sept. 10. We went to look at the pretty Romanesque chapel of St. Walderich on the north side of the church, and then, after our experience of the deep valleys and chasms of yesterday, determined not to climb the steep sides of the Linderest, but to take the road to Siegelsberg, and strike the line of the *Schweingraben* there. Passing through this village and crossing the brook just by the last house, which is a mill, we were fortunate enough to find our direction, and mounting the fields, came on the wall in an excellent state of preservation in the Wood of Hirschreute. At the top of the hill in the wood, where a

¹ Beschreibung des Oberamts Backnang-Stuttgart.

road crosses, were remains of a small tower. We descended through the wood, crossed a small brook, and ascended again still through the wood, but unfortunately lost the line, and were not able to recover it even at Steinberg, nor before we reached Grab (Rössle). Grab, I should suppose, owes its name to its position on the dyke. At Grab we recovered the line just north of the church. Here it is traceable as a slight depression in the meadows, and in the wood in front of us it becomes again quite plain. It must be eight feet high or more, and the base of the wall perhaps more than thirty feet broad, while the ditch is well-marked. In the woods, and crossing the gorges, we once more lost the true line, but by dropping down to Hankertsmühle and keeping as near as we could to the compass direction, we at last struck the line again about half-a-mile north of Würtemberger Hof. Here we found it in the woods, very well preserved, with a footpath upon it, which continued on the line till it reached the main road, and then we turned off slightly to the north-west to Mainhardt (Stern).

Sept. 11. The Roman station (Castell) at Mainhardt has been partially excavated, and in a meadow the walls of the two towers of the south gateway are still exposed¹. But, as I understand, the excavations have been covered in again, in accordance with an agreement made with the farmers. The camp does not lie true north and south, but must be about parallel with the Schweingraben. Its shorter side (one hundred and eighty paces) would be parallel with it, and its longer side at right angles to it. Its distance from the *limes* may be about five hundred yards. The corners are rounded, and not rectangular.

¹ They are five paces square; and the walls about five feet thick, and perhaps five feet high.

The town lies partly, though not mostly, inside the camp. The church is outside it, to the north. The position is a fine one, and commands a splendid view.

From Mainhardt to Gailsbach we could find no sure traces of the wall. After leaving Gailsbach the road is on the line of it for about a quarter of a mile. It then passes through a quarry, and continues for about a quarter of a mile as a field-road, with one or two houses on the left of it. It then becomes plainly visible, and is fairly preserved; but it is being rapidly dug away, and will soon disappear. Why do not the Germans declare it a national monument, and preserve its existence?

It continues to rise slightly, and then begins to drop as it enters the wood. The high ground at this point would seem to be a reasonable place for a tower. In about three hundred paces comes a gorge, with what may be the remains of a tower immediately to the south of it. Crossing the gorge, it is plain on the other side, with boundary stones in the ditch. On the top, about one hundred and fifty paces from the last, are evident remains of a tower, on the west of the wall, and flush with it. Its circumference is forty-one paces.

From this point the line descends, crosses a slight chasm, rises, and in about three hundred and fifty paces from the last tower crosses a road with a tower just beyond it, with a circumference of forty paces. The ground then descends, and in about two hundred and fifty paces we come to a gorge which *may* have remains of a tower to the south of it. Through this gorge there is fortunately a path which takes up on the other side, with Steinbruch on the left. We keep on in this direction, presumably on or in the immediate vicinity of the *limes*, until we reach Neuwirthshaus, where we stay for luncheon.

After leaving Neuwirthshaus, we took the line which the wall should follow through the woods, but saw no certain traces of it. We came out by Harsberg, where is a short stretch of road paved in a manner quite worthy of the Romans.

Still keeping on, we struck the main road just north of Heuholz, continued through Oberhöfen and Unterhöfen, Bayerbach, and then by a cut north-west into Oehringen (Württemberg Hof).

The line of the *limes*, if it proceeded in an undeviatingly straight direction, must have left Oehringen considerably to the west. East of Oehringen the Ordnance map shows no traces of it.

Is it possible that here too there may have been an angle, viz. from Bayerbach, north-west, into Oehringen, and from Oehringen, north-east, to Pfahläcker? This line would suit indications left by roads. Such an angle, if it occurred, would probably occur near an important station, and Oehringen is almost exactly midway between Miltenberg and Lorch.

Also, is it not possible that the angle at Welzheim, Pfahlbronn, and Lorch may be correlative to the angle from Walldürn to Miltenberg?

Sept. 12, we spent resting at Oehringen, the capital of the little state of Hohenlohe. It was here that Hansellmann obtained both the taste and the leisure for investigating Roman antiquities. Many antiques are to be seen at the Castle of Neuenstein, about three miles to the east; the results of the more recent finds go to Stuttgart. The Roman station is supposed to have been on the Untere Bürg, about half-a-mile north of the railway station¹, while to the east of it, on the Obere Bürg, several remains have

¹ See Hodgkin, 'Pfahlgraben.'

been found. The most curious existing relic to be seen at Oehringen is the so-called Orendelstein, which looks much like a Roman milestone *in situ*, with a later small stone-shrine braced on the top of it by iron clamps¹. It is about four feet high, and perhaps three feet in circumference.

Sept. 13. We left Oehringen by a path over the Obere Bürg which leads into the road between the Untere and Obere Bürg, and continues till it joins the direct line of the Pfahlgraben between Westernbach and Massholderbach. We found our way down into Westernbach, and keeping the main road for about one mile out of Westernbach, we again struck the line of the Teufelsmauer very plainly running west of north in the direction of Pfahlbach, and called in the map *Pfahldöbel*. There can be no mistake about this point: a boundary stone is set in the line of it on the left, and on the right we see coming up from the south a field-road, which represents the line. In the wood it is very well preserved, and must be eight feet high or more, with the ditch well marked to the east. Boundary stones are on it, and so is a footpath. In about one hundred and fifty paces it crosses a road, and must be ten feet high. In about two hundred and fifty paces it leaves the wood, and is recognised only as a bank between fields, and almost disappears. In two hundred paces it crosses the main road and goes up, the line being marked by some trees on it. So it reaches a height, and drops down into Pfahlbach, becoming either identical with or parallel to the main road which leads out of the village just west of north.

About one mile from Pfahlbach, on the left of the road,

¹ Suggestive names in the vicinity of Oehringen are Hunnenberg, Hunnenfeld, Windischenbach, Capellrain.

where a field-road crosses just before the kilometer stone (two, five from Sindringen), are what seem to be the remains of a tower, forty-one paces in circumference. This is about the highest point, and the road now begins to descend. We reach the cross-roads, where four ways meet. Somewhere about here the Pfahlgraben must cross the main road to Sindringen, and descend into the valley of the Kocher.

We continued along the main road, crossed the Kocher by the picturesque bridge, and passed through the curious little town of Sindringen, which is still almost entirely confined to the limits of its fortifications. We struck up to the hills on the north, hit a field-path bearing in the direction of the Teufelsmauer, crossed the main road to the north of the fields marked Pfahlacker, and following a balk or ridge between the fields, left Stolzenhof slightly on the left, and descended through a wood, and across the Jagst into the very pretty little town of Jagsthausen (Sonne). Here is situated the picturesque castle of Götz von Berlichingen, with numerous curiosities, the Iron Hand included, which, however, in the absence of the Amtmann, we were unable to see.

We bore up by the road and a footpath, hoping to strike the line of the Teufelsmauer above Leutershütterhof. There is a field-boundary which perhaps represents the line of it, and possibly the road as far as the next wood may be on it; and both here and in the wood for some distance it would seem to coincide with the boundary between Württemberg and Baden. But in this wood we were not quite fortunate in maintaining the true line. We crossed the Kessach about midway between Unter- and Oberkessach, climbed up through the wood on the other side, left Weigenhall on the left, made across fields for the

wood in front of us, skirted its western edge, and then reached Hopfengarten, and as it was becoming late, were obliged to hasten on by Dörnershof and Marienhöhe, two substantial and admirably kept farms, till we struck the main road to Osterburken (Kanne). We were afterwards told that in the wood north of Hopfengarten the wall is well preserved. Here too in the map occur the curious names of Welscherbuckel, with Hälidenrain slightly to the west.

Sept. 14. At Osterburken we were told that the main fort had been east of the railway station, and that many remains had been discovered, which were now at Carlsruhe, the capital of Baden. Also the map marks about one and a-half miles south-east of Osterburken, the remains of a Roman fort.

Leaving Osterburken we kept the main road for some half a mile, then crossed the fields by a crucifix just west of north; then in about a mile came to another cross, having a short distance in front a heap of stones, and one stone marked 1835. Here we struck into the wood, called die Hälde, and about a hundred paces to the west found the line of the Pfahlgraben well preserved, and about five feet high. In about three hundred and fifty paces from the beginning of the wood, just before it descends to a gorge, are the remains of a tower. It has been excavated, and is much demolished, and much overgrown: the *débris* covers a larger space than usual, being in circumference about sixty-one paces. The line is still traceable through the wood, but finally wears out. It must go through a garden and up over a clearing, for we recover it in the next wood in front. There, about fifty paces from the east side of the wood, and about twenty from the southern edge, we find a ruined heap, apparently

recently disturbed, and some thirty-five or forty feet across. In some two hundred and fifty paces we come upon another heap, but after this point there are others which seem to be made by the stones picked off the neighbouring fields.

The line about here being difficult to determine by reason of the number of arable fields, we took the easiest path down the valley by Bofsheim and Götzingen to Rinschheim (Ochse), where, as at Osterburken, we heard of the excavations of Herr Conrady, of Miltenberg, who seems to be the presiding genius of the north-western limit of the wall. It is worth noticing that here there are many *-heims* and *-ingens* outside the *limes* to the east, e.g., Berolsheim, Sindolsheim, Merchingen : and also a Pfalzwald (near Hungheim), and a Phoberg, north of Berolsheim. We were told that in the Hettinger Wald, to the east of the Rehberg, the line was again well marked ; but we were not fortunate enough to come upon it with anything like certainty.

Somewhere in this wood the Pfahlgraben is supposed to desert the straightness it has maintained since Welzheim, and to make an angle to the east of Walldürn, and then to proceed west of Glashofen, and east of Gerolzhahn, Gottersdorf, and Wenschdorf, to the Schloss Berg, which overhangs Miltenberg on the west.

We, however, despairing of being able to find the scanty traces of this change of direction, kept on from the Hettinger Wald by a field road, which brought us straight just west of north into Walldürn (Ochse).

Sept. 14. We pursued the main road from Walldürn, with finer views of wood and valley than we have had for the last two days, leaving Gerolzhahn on the left. Through Gottersdorf beyond there runs a road which

seems to pursue a tempting direction. We turned off to Wenschdorf to lunch, and heard again of Herr Conrady. This debateable corner of the wall is as mysterious as the part in the neighbourhood of Gmünd and Lorch. Here I notice, to the east of the line, a Pfahlbach, south of Umpfenbach. From Wenschdorf we turned up across the fields and through the woods, until we found ourselves upon the Schloss Berg, which has been thought to be the northern termination of this portion of the wall. Here the Main makes a grand curve through densely wooded hills, and as it sweeps round, the Schloss Berg overhangs it on the south, jutting out from its fellows to meet the river.

On this commanding height, which but for the thick trees would afford a glorious view, the map marks a Römer Schanze; but if it is a Roman fort, it is such a one as I have never seen before. The whole of the summit of the Schloss Berg is surrounded by a *glacis* of huge stones, piled loosely together, and forming a wall of various heights; but which at its south-east corner must have a slope of fifty feet on the outside, and thirty feet on the inside. Of solid, hewn, faced masonry there is not a single trace. The form is not square, but follows the form of the hill. On the inside are two additional lines of defence similarly composed. What the exact size of the fort is I cannot say, but an idea of it may be formed from the time (half-an-hour) it took us to walk round it. If this fort were in England or Wales we should, I think, call it Celtic. It reminds me of the hill-forts called Tre Ceiri, on the Rivals, near Clynnog, in Carnarvonshire, whose strength depended on the steepness of the hills, and the number, size, and looseness of the stones. Here, perhaps, it would be safest to call such a fortress *All-*

Deutsch, and it is quite conceivable that it may have been occupied and modified by the Romans, but that they built it as it stands I cannot bring myself to imagine. It is gigantic and magnificent. Our host at Wenschiedorf spoke of it as a *Riesen-Schanze*, and so it really is. The existence of such a fort, and the prominence of the height of Hohenstaufen, would almost be reason enough for making a line of connexion between the two.

We dropped down the northern slopes of the Schloss Berg to Miltenberg, by a very steep path, and were rewarded by a magnificent view up the valley of the Main. Beneath us to the right is Herr Conrady's Schloss, with its old red sandstone tower; and our lodging for the night is at the picturesque inn of the Riese—which has a long history, and has given a lodging before now to Frederic Barbarossa, to Luther, to Gustavus Adolphus, and to the great Duke of Marlborough.

Here at Miltenberg we end what may be considered as the second portion of the Roman Wall.

With regard to the testimony of names, it is worth noticing that north of Miltenberg is *Bürgstadt* (cf. Burgsalach, Obere and Untere Bürg), above which, on the height, the map marks another Römer Schanze.

From Miltenberg to Gross Krotzenburg it has been supposed that the Main itself was the *limes*, that it was defended by forts, and the Pfahlgraben proper was dispensed with. Such forts are Woerth, Obernburg, and Neidernberg. It would almost seem that pairs of stations were erected, one on each bank, to regulate the river traffic. It can hardly be accidental that we have Klein Heubach and Gross Heubach, Trennfurt and Klingenberg, Woerth and Erlenbach, Obernburg and Elsenfeld (with a Römer

Castell close to the railway station), Gross Wallstadt and Klein Wallstadt (with a Römer Schanze a mile to the east of it), Niedernberg and Sulzbach, all roughly opposite to one another, and roughly equidistant¹.

In this district, adjoining the Main, it is also worthy of note that there are numbers of graben and dykes on both sides of the river; more especially from Woerth to Niedernberg on the west, and from near Soden to about Klingenberg on the east.

Sept. 16. We travelled by train from Miltenberg to Aschaffenburg, and thence to Hanau (Adler), which receives an interest from being the birthplace of the brothers Grimm.

Sept. 17. We now come to the third and last portion of the *limes*, viz. that which starts from Gross-Krotzenburg on the Main, and includes the fertile Wetterau and Rheingau, ending between Hönningen and Rheinbrohl, near Andernach.

We took train from Hanau to Kahl, and walked to Gross-Krotzenburg, where we were shown, near the school-house, some remains which seem to have formed part of the south-western angle of the Roman fortress. The town is built in the middle of the castellum, and there is not much to be seen of it.

Leaving Gross-Krotzenburg, we followed a road which led past the cemetery and across the railway, through a wood, till it crossed some marshy land, after which, on the right, appeared traces of what seemed to be the Pfahlgraben. This proved to be a correct surmise, for on bearing about fifty yards to the right of the wood, through the next wood, we undoubtedly came upon it, about three

¹ This would prove only that the Romans regulated the river traffic, not that the Main was the *limes*.

feet high, having a base of about forty feet, with a road upon it. It then crosses the main road to the right of the Neu Wirthshaus, and then another road. The road is still on it at first, but afterwards leaves it and goes east. The Pfahl keeps straight on in the wood, which is called Grosse Bulau, well-marked, about four feet high, and with a footpath on it. In about half-a-mile it is five feet high or more, and we discern the first slight signs of the ditch to the east. So it continues for some four or five hundred yards, until it disappears in an alder swamp. We were unable to recover the line until after crossing the railway, about a quarter of a mile north of Am Pfahl. Here we were fortunate enough to find it again, recognizing its section as it left the wood and crossed a meadow, being thickly overgrown with weeds. It then entered the wood again, and was about four feet high. It again became involved in marshes, and must somewhere here change its direction, taking a slightly more northern course. Its line is well-marked, but is intersected by swamps, and at last emerges on a brook, where it disappears; but it may be supposed to have crossed the Kinzig just east of the station of Altenburg, where there are remains, which have been dug out, and which are called in the map Römerbad. These remains are probably part of, or an appendage to, a much larger station.

We were unable to cross the Kinzig at this point, and therefore had to go round through Rükkingen, resuming our direction on the other side of the river. We made our way by the east end of Langendiebach, and west of Ravalzhausen, to Marköbel (Hirsch, but try Wilhelm Stein), where there are remains of a large camp, in part recently excavated; but without finding any sure and satisfactory traces of the Pfahlgraben.

Sept. 18. At Marköbel the line changes to a direction of about north-north-west. We first came upon it about a mile and a-half north of Marköbel, forming the eastern boundary towards the fields of the Oberwald. It is much overgrown, and is at first rather poor, though plainly marked, and it has a wide strip of level turf close to it on the right—a sort of field-road. Soon it becomes about four feet high, though half of it is cut away, and a road made out of it. In less than one thousand paces it crosses the road from Langen Bergheim, and here are traces of a tower. In about five hundred paces it enters the wood, and the road is for a long distance upon it. There is here a marked want of stone, the soil is soft and loamy, and the roads have no good bottom. There are also holes, now full of water and rushes, in the substance of the Pfahl, and also to the west of it, and the regularity with which these holes and pits occur inclines one to believe that they represent the site of towers and castles from which every particle of stone has been quarried away by the Bauers, leaving only the pit to mark the place where they once have been.

The counting of paces at this point may be interesting. After entering the wood—

250 paces, a hole on west of the Pfahl.

250 paces, a hole and swamp.

150 paces, hole and swamp.

100 paces, hole and swamp.

250 paces, hole—a road crosses.

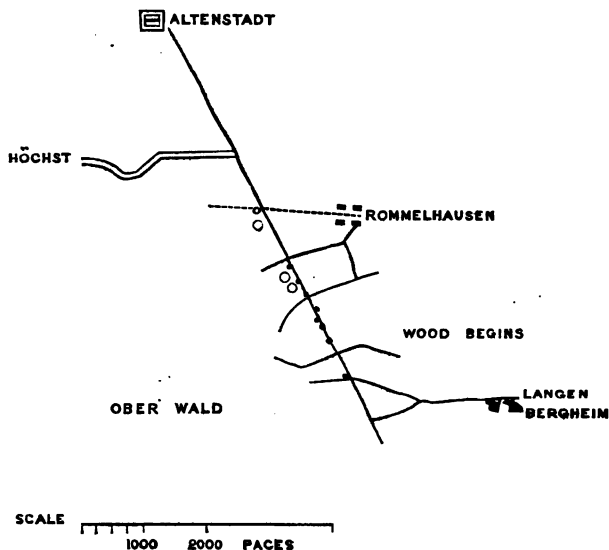
150 paces, slight marks.

150 paces and 35 paces west of Pfahl, well-marked remains of a tower, with an inner and outer circle (or square) and marks of a trench between the two. The circumference of the inner circle is

forty-eight paces. This is the best-marked castle we have yet seen on this portion of the Pfahl.

125 paces, hole, a road crosses.

175 paces, large remains about thirty paces to west of the Pfahl. The impression left on my mind at this point was that castles or towers of large dimensions might be expected at intervals of three hundred paces, and watch-towers at intervals of two hundred and fifty paces; sometimes one hundred and fifty and sometimes one hundred.



About one hundred paces from the last-mentioned tower the Pfahl assumes more imposing dimensions, being some six feet high, with the ditch well-marked to the east. Then a road crosses, then a brook; the ditch is well-

marked, and the wall about eight feet high. Then it rises past some big holes or quarries, then begins to descend, passes what may be the site of a small tower, and in twenty-five paces we come upon the remains of a large tower or castle about thirty paces west of the Pfahl, much like the one last described, and having the circumference of its inner circle about forty-five paces. In two hundred paces we come to a quarry; in one hundred paces a road crosses, cutting through what may have been a small tower, quite close to the Pfahl, and we see Rommelhausen away to the right, rather behind us.

The road is now quite close to the Pfahl, on the right of it, but the Pfahl itself is overgrown with young firs, thickly planted, and hard to trace. It soon falls away, though it is still traceable. It crosses the hard road to Höchst, and in about five hundred paces wears out altogether. We follow the main road over the Nidder into Altenstadt (Post). In this district there are *-heims* and *-ingens* to the east of the Pfahl, though not far from it. The suggestive names hereabouts are Hainchen, Heegheim, Leidhecken, Staden. Since we left Marköbel we have been in Hesse Darmstadt, our course from Gross-Krotzenburg to Marköbel having been in Prussia.

Altenstadt is, I believe, the site of an important Roman station.

Leaving Altenstadt by the hard road to the west, and turning up a field-path to the north, we come, in about a mile and a-half from Altenstadt, into a wood. We soon come on what may have been a tower; in two hundred and fifty paces on what may have been a tower; in another two hundred and fifty paces on a hole, perhaps once a tower; then in one hundred and fifty paces, where the descent begins, on a really large one, hollow, and about thirty

paces west of the Pfahl. Striking that distance to the east, we come upon the Pfahl itself, well-preserved, and some six or eight feet high, with the ditch well-marked. In about two hundred paces it leaves the wood, and here are remains of a small tower, and its line is marked across the ploughed fields by a field-road. Stammheim is in front of us to the north-west. The line crosses the main road, continues as a field-boundary marked by one or two trees in front, then as a slight ridge, marked by boundary stones, and so on through Staden. We cross the bridge, bear slightly to the right of the main road, and resume the line we followed before entering Staden. A field-road is here about on the line; but about a mile and a-half north of Staden, and three-quarters of a mile east of Leidhecken, the line is again well-marked. Here the ground slopes both ways, there are many stones, and very likely there may have been a tower or castle. The line is here quite plain until it crosses a road, then it wears out, but a field-road continues it, till it becomes lost once more, but reappears again as a hollow road leading up the hill into the main road to Bingenheim. It crosses the main road, and for a short distance is visible as a bank in the fields. At this point, about two hundred and fifty paces to the west of the Pfahl, on a prominent hill about a mile and a-half from Reichelsheim, is what must have been an important castellum. But it has been for the most part quarried away, and is now in process of being ploughed up. Here, not only does a road cross, but the Pfahl changes its direction slightly to the east of north. We had hoped to find accommodation for the night at Reichelsheim (Post), but were unsuccessful both there and at Bingenheim (Darmstätter Hof), and had therefore to walk on by way of Gettenau to Echzell (Präfried), where

we were most comfortably lodged for the night. Just east of this neighbourhood are Selters, famed for its waters, and Glauberg, for its salt. These would lie outside the Roman *limes*, but near Echzell there is a Römerbrunnen which supplies a sparkling saline water, which seems to be still in request.

Sept. 19. Leaving Echzell, we made our way to Bisses, where the line of the Pfahl may be parallel with the road taking past the west end of the village. Our way then lay by the shortest and straightest path to the right of the Schwalheimer Hof, but it is probable that the Pfahl here made an angle to avoid what is now a meadow, and was probably once a swamp. The line then follows the road through a piece of wood, near the end of which, on the right, it appears as a wood-boundary, and then a road crosses immediately. The line must then have gone up the western slope of the Buch Berg, for on the left are the remains of an important castellum, though fast disappearing before the spade, the pickaxe, and the plough. This castellum would seem to have been almost flush with the Pfahl, and of about the same size as the one near Reichelsheim. Unter-Widdersheim is below us to the north. We pass through it and Steinheim without seeing any satisfactory traces of the Pfahl¹, and in order to cross the low meadows in front of us, have to go round by Hof Grass, and so into Hungen (Solmser Hof); but perhaps the Pfahl followed a straighter course past a conspicuous tree on the hill to our left, called the *Markt-Linde*, where once (according to Cohausen) a fair used to be held on the 8th of August.

At Hungen the line seems to have turned to a little north of west, and we endeavoured to find traces of it, as

¹ At Steinheim the line changes to the north-west.

suggested by Cohausen, between Hungen and Bettenhausen, though without success. Recent excavations, however, have exposed a castle of about forty paces square, with rounded corners, in a field just south of the road, about a mile and a-half east of Bettenhausen and the same distance south of Langdorf.

Just north of this, and also north of the road, is a ridge in the fields which looks very much like the line of the Pfahl. It forms a field-boundary, crosses the main road between Langsdorf and Bettenhausen, ascends the hill above the latter place, and on the summit north-west from Bettenhausen, and about thirty paces to the left of the line, are signs of what may be a station or castellum. The position is a commanding one, and affords a magnificent view.

We then followed a field-track which led us into the road to Birklar; we bore down nearly to Arnsburg without seeing any sure traces of the Pfahl, and then made our way through the woods to the pretty town of Lich (Holländischer Hof). Lich lies on the Wetter, from which the Wetterau takes its name.

Sept. 20. We left Lich, and struck once more through the woods to Kloster Arnsburg, with its picturesque ruined church and cloister, but did not discover until too late that here was the site of an important Roman castellum. Nor am I able to say what is the true course of the Pfahlgraben in this neighbourhood. The first sure traces of it we could find were in the wood, to the left of the road between Arnsburg and Kolnhauser Hof, where we came upon it with difficulty in the thick wood. When once found, however, it was different, for it has a footpath upon it. Hereabouts it is some six or eight feet high, and the ditch is well-marked. Its direction is north-west by north. In about one mile it changes to north-north-west by north.

In four hundred and fifty paces it changes a point more west, and again in three hundred and fifty paces it changes direction again. All along this latter part it is much overgrown, being planted thickly with young fir-trees. The road is mostly on the north, so that it was hardly possible to see what indications of towers there might be on the other side. It finally comes out of this wood just south of the bend in the railway, and very close to it, not far from a house with a barrier and a road crossing both the railway and the line of the Pfahl. It continues well-marked through the wood, though occasionally much overgrown, crosses the hard road between Dorf-Güll and Garbenteich, and about five hundred paces before it finally leaves the wood; and some two hundred paces east of the road from Grünlingen to Garbenteich are evident traces of a tower some thirty paces to the south of the Pfahl, but nearly concealed by the thick wood¹.

On leaving the wood it begins to be ploughed up, but the line continues as a ridge and field-road until it reaches its most northerly point about half-way between Grünlingen and Watzenborn. There is a tall tower to the south of us on the Wart Berg, and to the north, in the direction of Giessen, a charming view. The Pfahl now turns to the west-south-west, and crosses the main road to Grünlingen. There are, however, hardly any traces of it. In four hundred and fifty paces from the road it reappears; there is a ditch on both sides, and, the country just here being bare down, the Pfahl seems much like Graham's Dike in Scotland. In one hundred and fifty paces it changes direction to about south-west. In twenty-five paces there is a tower in a stony hollow close to the wall, and there seems to have been an old road crossing, or

¹ The wood was so thick that thirty paces may be too much.

something, which has caused the ditch to be partially filled up on the northern side. In ninety-five paces, on the summit of the hill, about ten paces inside the Pfahl, are the remains of a tower or castle, well-marked, and in circumference about sixty-five paces. In about seventy paces a path crosses; a number of volcanic stones lie tumbled about, but not in such plenty as at some points on both the English and Scotch walls. At the top of the next hill (five hundred paces) we are almost level with the tower on the Wart Berg, and there is a splendid view. From here till it crosses the main road to Butzbach the wall runs in a perfectly straight line for some six miles, planted with young trees and with a field-path to the right. It was only at intervals that one was able to penetrate the wood and walk on the eastern or inner side. When one caught glimpses of the Pfahl it seemed to have the appearance of a double dike or wall.

The only traces of towers which we were able to discover were to the south of a road immediately to the south of the road between Lang-Göns and Holzheim. About one hundred and twenty paces south of this were evident remains of a tower, which had been recently disturbed, and in fifty paces more were further excavations. This was at nearly the highest point of the wood, where the ground began to descend. About three-quarters of a mile on is another road, and in some fifty paces we come on a tower thirty paces in circumference, and in fifty more to a stony one nearer to the Pfahlgraben.

After crossing the road from Kirch-Göns to the Silber Berg there are remains of a large tower, which have been excavated—and in three hundred and thirty-five paces remains of another tower. The line of Pfahl goes on till it is cut by the railway, and then proceeds in the

same direction, leaving Pohl-Göns on the right, till just before the hard road to Butzbach, when it becomes diminished and partly lost in the arable fields. We caught the train to Giessen (Rappen), where we turned to spend Sunday and to rest.

Sept. 22. We took train to Butzbach, walked up the road past Wilhelmshöhe, where it has been supposed that a camp was, but saw no traces of one. About one mile further up, before the road forks, the line of the Pfahlgraben may be plainly seen on the right or east of the road, apparently in the same line as the long stretch we followed on Saturday. About fifty-five paces to the north of the road, and fifteen from the Pfahl, are evident remains of a tower, a circular heap in the centre of what was probably a square enclosure.

We entered into the wood on the left of the road, and were fortunate enough to come upon the Pfahl in about ten minutes, some five feet high, and with the ditch well-marked. It has, however, not quite the same direction as the last portion, being now about south-west instead of south-west-by-west. The change possibly took place at the last-mentioned tower, which was on a hill with the ground sloping away from it on both sides. The place where we first undoubtedly strike the Pfahl is where it crosses a road, and a road branches off to the right of it, running due west.

The Pfahl continues through the woods, well-marked, until it comes out into an open meadow, with Hausen above us on the west. During this part of its course, from first striking it in the wood till coming out into the open—a distance of about one thousand six hundred and sixty paces—we passed three undoubted towers, and two possible sites of towers.

The paces were—

100 road ;

125 hole in Pfahl ;

55 road ;

100 road ;

115 tower, twelve or thirteen paces from Pfahl, with circular heap in the middle of what may have been a square enclosure :

135 road ;

110 path ;

35 hole, eight paces to south ;

150 path ;

35 hole and small heap, eight paces south ;

100 road ;

140 road ;

50 path ;

35 path ;

75 tower, fifteen paces from base of Pfahl, inner heap about forty-three paces in circumference, with traces of an outer ring ;

15 tower, consisting of another heap similar to the last, though somewhat larger, and not having the outer enclosure distinctly marked. Here, too, a road crosses, and we picked up a piece of Samian ware ;

155 road ;

100 path ;

30 path. The Pfahl leaves the wood and enters the meadow, with Hausen above to the west.

From this point the line of Pfahl crosses the fields, plainly at first, but becomes indistinct, and though it is not marked in the Ordnance map we were fortunate enough to strike it in the wood below the Haus Berg. At the point where we found it, it had a heap close to it

on the left, about twenty-eight paces in circumference, and its direction was slightly east of south. In about one hundred paces it crosses a main road at a point where four ways meet. The wood was here too thick to follow it, and we followed the road, which was roughly parallel with it, for about two hundred paces. Then the Pfahl changes direction to about south-east; there being apparently in the angle, concealed by tangled wood, a tower or castle of more than the ordinary size, and a road crosses. In one hundred and twenty-five paces it changes direction again to a little west of south, and in one hundred and ten paces to south-south-west. In fifty paces it crosses the road, being well marked; and in fifty paces leaves the wood and becomes almost lost in the arable fields.

It may, however, be seen as a ridge in the fields, and its line again crosses the road, and we see it as a bank with a tree upon it. But although we tried to keep it in sight, we lost it altogether, and followed the road through Hoch-Weisel, Fauerbach, and Langenhain, where we were comfortably housed for the night (Wissig).

The country here becomes picturesque, and finely-wooded heights are in front of us.

Sept. 23. In the gardens at Langenhain, on the left (or east) side of the road, the line of the Pfahlgraben may be plainly seen running south-west by west. Some five minutes' walk behind them is the site of a Roman castle or camp, now called 'Die Burg,' where many remains have been found; but it is now under cultivation.

Leaving Langenhain, we crossed the Usa, with Ziegenberg (the seat of the family of Von Stein) on our right, and leaving the Eichkopf on our left mounted the hill in front of us. We at first thought we had found the line of the Pfahlgraben in a bank and ditch, with a footpath upon

it, which led in the correct direction ; but whether we lost it, or it deserted us, the result was that we certainly lost ourselves, and did not recover the true line until we reached a certain solitary 'Tannenbaum,' to which we were directed, and which turned out to be upon the Pfahlgraben itself. The line makes for the Kaiser Grube—a lead and silver mine—and before reaching it passes two conspicuous heaps, probably connected with mining operations, from the higher of which there is a magnificent view. Hereabouts, too, a cross section of the Pfahlgraben has been made, some fifteen or twenty feet deep. Close to the Kaiser Grube, in a potato garden, are the remains of a Roman castle. Owing to the disturbance of the ground, and to the thickness of the underwood, it was very difficult to discern the traces of it. As far as I could judge, one of its sides seemed to be about thirty-one paces ; but possibly this was only a portion of it. Beyond this camp or castle we found the Pfahlgraben again, and followed it until it crossed the boundary between Hesse and Nassau (now Prussia). Soon it becomes identical with the boundary, and here is very well preserved.

Here we have the Kuhkopf on our left, and there should be a castle, which however we did not find. About this point the direction changed several times, varying from south-west to south-south-west¹. In one hundred and eighty-five paces it comes to a place where four roads meet, and enters a wood, consisting here of a simple ditch. The direction here again wavers. It changes in three hundred paces to south-west by south, in thirty-five

¹ From a cross road, 40 paces hole, 75 changes south-west, 75 a road, 75 south-west by south, 20 hole, 185 south-south-west. The numbers 35, 70, and multiples thereof, generally bring some feature of notice.

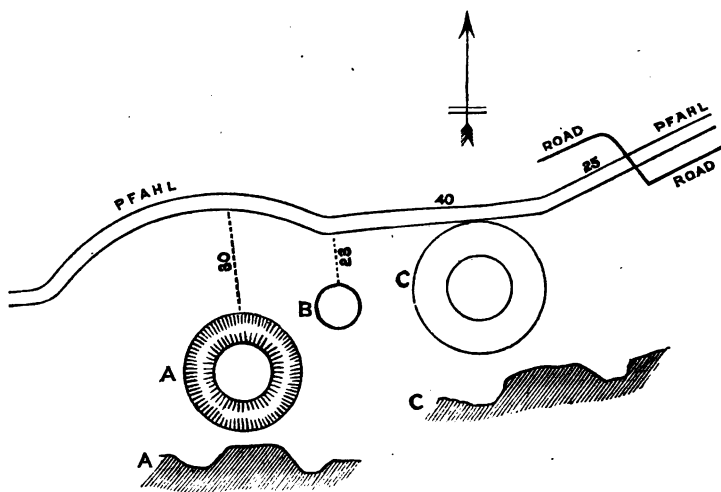
to south-south-west, in seventy-five to south by west, in fifty cuts a road, and in seventy comes out on a road near a boundary stone, with wired palings on the right of us and tangled underwood on the left. Somewhere hereabouts must be the camp marked in the Ordnance map, and called Capersburg; but we must have passed it before we were quite clear as to our position. About here, too, the direction changes to south-west.

At the end of the palings, on a tree, is a direction-post to Wehrheim and Lochmühle. Here the course of the Pfahl is south-west by west. At a stone, beyond, the course again changes, and we come to a road. Here, thirty-five paces to the south of the Pfahl, is a tower heap, fifty-two paces in circumference; in four hundred paces we come to a road and then to a clearing. (See plan, p. 64).

We sat down to eat our luncheon by three heaps. What these heaps really are it would be difficult to say for certain. The probability is that they are two watch-towers, with a heap belonging to them for some subsidiary purpose. After these towers the direction is at first west-south-west by west, but in about eighty-five paces it becomes south-west by west. In one hundred paces there is a road, with a tower-heap twenty-five paces to the rear of the Pfahl; in four hundred and eighty-two paces it changes direction to south-west by west; in seventy to south-west; in two hundred to a little west of south. It crosses a hard road in one hundred and thirty paces, bends round, and in one hundred and twenty-five paces is west-south-west. It ascends the hill, and continues through a wood until we come upon four heaps, marked *Römer Thürme* in the Ordnance map. (See plan, p. 65).

Of these heaps (for they are not all necessarily towers) A has been excavated, and contains the remains of a

tower about fifteen feet square. *B* has been excavated and tumbled about, but seems to contain no masonry.

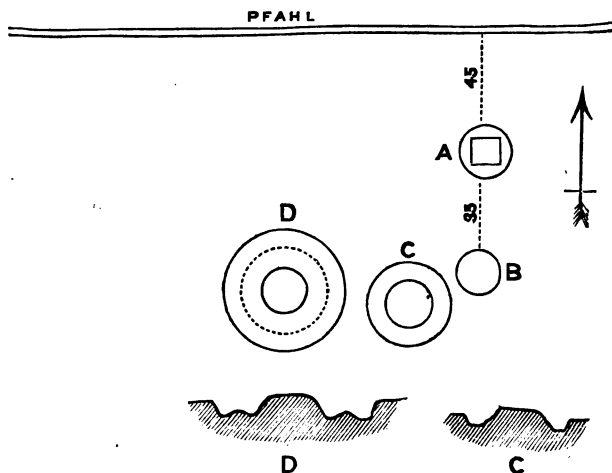


A. inside 62 paces, outside 92; B. outside 46 paces; C. inside 63 paces, outside 110.

D is remarkable as having, in addition to the trench, remains of masonry in the trench, making an additional ring.

From these heaps, in three hundred paces, near a road, there is another change in the direction of the Pfahl; and in three hundred and ten paces a tower-heap, sixty paces in circumference, and thirty-five paces from the Pfahl. In five hundred paces, again close to a road, another such—about thirty paces from the Pfahl, and fifty-eight paces in circumference. In two hundred paces we come to a road. Here the Pfahl is very well de-

veloped, six or eight feet high, and with a course west by north: its substance seems to become stonier than we have yet seen it. In three hundred and eighty-five paces it bends south-west by south, and thirty paces to the rear is a tower-heap, sixty-four paces in circumference. There is a road just to the east of it. Here the Pfahlgraben is almost at its best; it must be ten feet high, and with a base of thirty feet, and it has a ditch on both sides:



A. circ. 64 paces; B. circ. 49 paces; C. inside 66 paces, outside 102 paces; D. inside 60 paces, middle 74 paces, outside 120 paces.

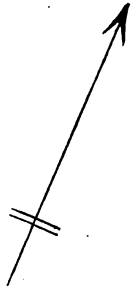
there is a path on the top of it, and Lochmühle is not far off. In two hundred paces it changes from south by west to south-west, and in seven hundred and thirty paces to south-west by south. In two hundred paces more we come to a road, and have Lochmühle close to us on the right. Here it crosses the valley, but seems to leave no

trace, but we find it again in the wood on the other side; and so we pursue it until it takes out into the main road to Wehrheim, where we leave it to turn up the road to the Saalburg.

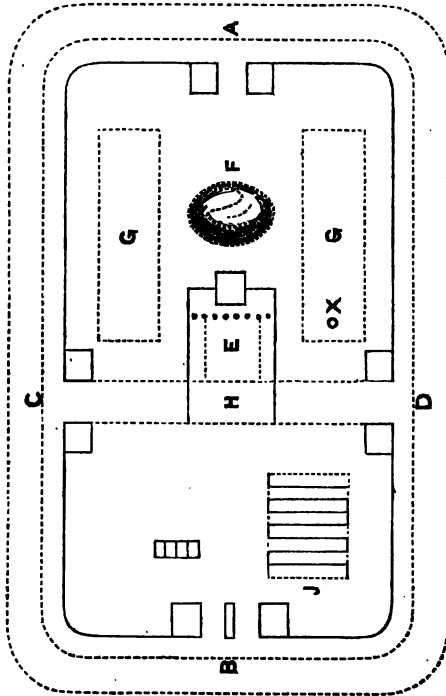
This is a magnificent specimen of a Roman fortress, around which a civil population grew up, some of whose houses we see. Their cemeteries must have been to the right and left of the road which leads through the fortress itself to Heddernheim (Novus Vicus). The Saalburg has been a rich source of Roman antiquities, which are preserved in the Saalburg Museum at Homburg, which is some five or six miles distant. On the spot itself is a shed where several things—tiles, pottery, &c.—are preserved; and some quarter of a mile off is a house which has been built to contain the remains found in the graves. The excavations are carefully conducted under the direction of Herr A. von Cohausen and Herr Jacobi (who have written a book on the subject)¹, and there is a guide who conducts visitors over the fort. It has been supposed that the fortress was built by Germanicus, on the site of a castle originally erected by Drusus to overawe the Chatti (Hesse); but doubt has been thrown upon this. However that may be, the present form of the fort is thought to be not older than the time of Domitian. The troops stationed here were the 8th Legion (Augusta), the 22nd (Primigenia, Pia, Felix), the 1st cohort of Roman volunteers, the 2nd cohort of Rhoetians, and the 3rd cohort of Vindelicians.

The fort is thought to be adapted for three cohorts. Its size is two hundred and sixty paces by one hundred and sixty paces, the north side being the shorter. The gates on the north and south sides (Porta Praetoria and

¹ Das Römer Castell Saalburg; Homburg, 1883.



PLAN OF THE SAALBURG

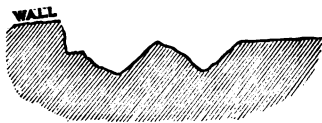


A. Porta Praetoria. B. Porta Decumana. C. Porta Principalis Sinistra. D. Porta Principalis Dextra. E. Praetorium. F. Amphitheatre. G. Latera Praetorii. H. Exercise Ground. J. Magazine. X. Well.

Decumana) are in the middle; not so those on the east and west (Porta Principalis Dextra and Sinistra), which are nearer the southern side. All the gates have towers;

the Porta Decumana must have been double, and the masonry supporting the dividing pillar remains. There is no such massive work in the fortress as the north gate of Housesteads (Borcovicus), nor do we here see the stay against which the gates closed; nor the sockets in which the gateposts turned. The arches of the south gate were standing in 1816, but were used to provide stone for metalling the *chaussée* which leads to Wehrheim.

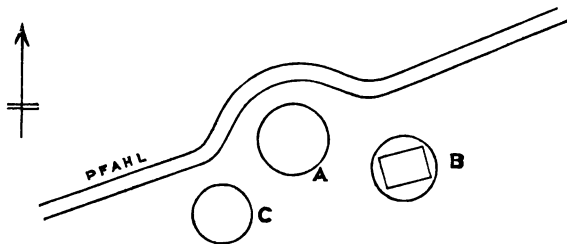
The Praetorium is well preserved: it has all the appearance of an ordinary Roman house, with atrium, tablinum, oecus, and cubicula. The bases of the pillars of the peristyle remain *in situ*. Outside this house to the north is an oval depression, probably the site of an amphitheatre. There seems to have been such an one outside the wall at Borcovicus, only much smaller than this. There is at least one good well (if not three) within the fort, and another is in the civil settlement outside it. The fort is surrounded by a double trench with the section—



The Pfahlgraben is distant from the Saalburg about three hundred paces to the north, and is not quite parallel with its northern wall. We slept at the hotel near the Saalburg, and were very comfortably lodged.

Sept. 24. We left the Saalburg by the Porta Praetoria, and in three hundred paces struck the Pfahl. We pursued this without coming upon anything of importance until reaching the summit of an extremely stony hill, where the Ordnance map marks Hunengräber. Here were two heaps, not ten paces apart, the eastern one

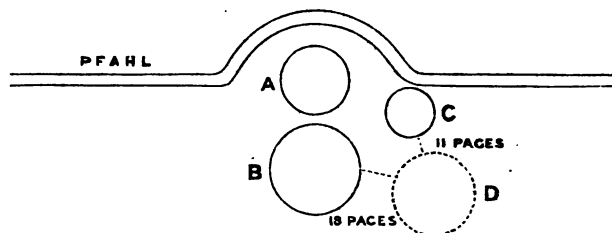
being in circumference forty-two paces, the western one sixty paces. The latter had been excavated, and contained the remains of a tower seven paces square, and round it were signs of a ring or circle. It would be hard to say how far these were from the Pfahl, for after becoming more and more stony it had about here totally disappeared. To our right, on the north, in the wood, were great masses of rock, which themselves made a gigantic wall for some distance. We soon came to a road, and the Pfahl reappeared. Its appearance in this neighbourhood was much like that of the Teufelsmauer in Bavaria, a heap or bank of stones; with a ditch it is true, but not nearly of such dimensions as it had when the wall was an earthen one. The wall is a mere stone heap, ten or twelve feet wide, and perhaps one and a-half feet high, and the ditch is only slightly marked. So it continues, with now and then a slight variation, though the main direction of south-west is preserved, until on the Rosskopf we come upon some remarkable groups of heaps, perhaps towers.



A. circ. 54 paces; B. contains a tower 5 paces square; C.

Of these heaps, A lies in the course of the Pfahl, and has been excavated, but it looks more like a cairn than a watch-tower. B contains the remains of a watch-tower

five paces square; these are on the top of a hill, and all round the ground is covered with stones. About here the Pfahl turns south-west by south, and there is either no ditch or a very slight one. In about six hundred paces is a large heap flush with the Pfahl, which has contained a tower about sixteen feet square. There is a pit outside it. In about six hundred and twenty paces more we reach another summit, marked by an equally curious arrangement. What the exact meaning of this arrangement may be it is hard to say.

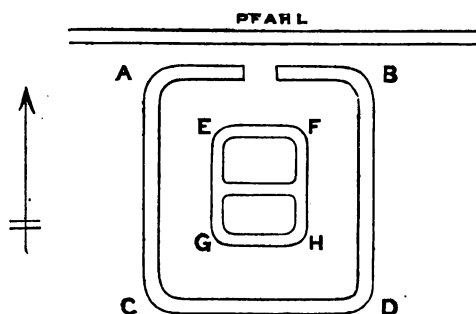


A = 60 paces circ. ; B = 66 ; C = 50 ; D = 66.

In about six hundred and forty paces the Pfahl reaches a main road, and bends off west-south-west. It is here three or four feet high, heather-covered, and with the ditch seven or eight feet wide. It gradually becomes higher, six or eight feet high, with a base fifteen or twenty feet broad. Palings and wires are beside it on the left; it crosses a road with a gate and notice-board beside it, goes up with a road in the ditch, until at the next gate we find ourselves at Castell Heidenstock. This is about twenty-five paces square, and close to the line of the Pfahl.

The Pfahl goes still on and up, with a road beside it, and then only a footpath, past sign-posts put up by the Taunus Club, sometimes well-marked and over-grown

with heather and whortle-berries. At last it wears out into a mere stony track, and at the top of the ascent becomes lost in a perfect wilderness of stones. From here there is a most splendid view, but in the confusion of stony traces we lost the Pfahl, though fortunately, on coming out on the Elizabethen Schneusse, we found it running to our left alongside of the road. At a place where four ways met we again took to the Pfahl, which here runs west by south. In one hundred and sixty paces a road crosses, and there is a castle or tower close to the Pfahl, which apparently represents a type which we have constantly seen imperfectly represented, though never before till now complete. It consists of an external wall, with gate towards the Pfahl, enclosing a tower with a double chamber¹. The external enclosure measures thirty paces by twenty-eight, the internal tower thirteen paces by ten. Here the line changes to slightly north of west.

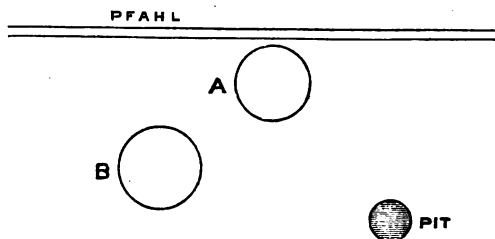


AB=28 paces; AC=30; EF=10; EG=13.

In about four hundred and fifty paces it crosses a hard road, and is here well-marked, having become an earth-bank again. It crosses one or two wood-roads, and changes

¹ Cohausen, 'Am Alten Jagdhaus.'

from about west to west-south-west. Soon after this there is a tower-heap, quite close to the Pfahl (fifty-five paces in circumference), and twenty-four paces south-west another stony heap (fifty-eight paces in circumference).



A = 55 paces, B = 58 paces.

In about six hundred and fifty-five paces a road crosses, and there is a great heap of slate, apparently coming from a slate quarry about here; then in seventy paces, to the left of the road, and about fifteen paces from the Pfahl, is a tower-heap, which has been excavated, and contains the foundations of a building six paces square. In seventy-five paces a road crosses, and we then left the Pfahlgraben to ascend the Gross Feldberg, which is the highest point among this group of hills, and must be some two thousand eight hundred feet high. Hence there is a magnificent view, and we do not lose sight of the summit for some days. It is to this part of the Pfahlgraben what the Hessel Berg was in Württemberg, and what Hohenstaufen was later on. There is on the top a curious comb of rocks, which has a legend attached to it, and is known as Brunhild's Bed.

We left the Feldberg, and followed the telegraph posts down to the north, in the direction of Ober-Reifenberg, when we struck it again on the northern slopes of the

Feldberg. Here it runs about south-west, and is well-marked. The bank is good, but the ditch not remarkable; its section may be represented thus—



In about one thousand two hundred and fifty paces it leaves the woods on the mountain side and enters a meadow, and in ninety paces we have above us to the left, about thirty-five paces from the Pfahlgraben, a castle, apparently like that of which we saw a good example before, just before reaching the Feldberg. It almost looks as though here the Pfahlgraben had had a second line, and there is a fine view to Ober-Reifenberg.

In two hundred and forty-five paces we enter a beech wood, and then in about four hundred paces come to a hard road where seven ways meet, and there are signs of a heap, which may have been a tower, close to the Pfahl.

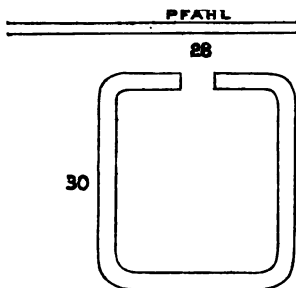
In this wood I notice for the first time a number of circular flat spaces, generally about fifty-six paces in circumference, and occurring here at intervals of about eighty-five paces (downhill). They may be connected with mining, or tree-culture, but what they really are I am not prepared to say. Their form is this—



It is about one thousand one hundred and seventy-five paces from the road last mentioned to the brook in the bottom of the valley (Emsbach). Possibly there may be two tower-heaps (about fifteen and thirty-five paces from the Pfahl) about two hundred paces from the road. After crossing the brook there are traces of a tower on the

west side, about twenty paces, or less, from the Pfahl. On the top of the ascent, two hundred and fifty paces from the last, are the remains of a tower, which has been dug out, rather more than fifteen paces from the Pfahl. In one hundred and seventy-five paces the main hard road is on the Pfahl. In seven hundred and eighty-five a road crosses, and in four hundred and ninety-five we strike the *chaussée*, just above Glashütten (zum kleinen Brauhaus), whither we turn for the night.

Sept. 25. Leaving Glashütten we resume the line of the Pfahl where we left it last night. It is here a stony ridge, with a path beside it. It leaves the wood and enters the meadows, where its line can be well discerned. As it ascends over the ploughed land it disappears. We cross the road to Cröftel and come upon a camp or castle, close to the road, and apparently close to the Pfahl, which, however, is not visible here. Its long side is thirty paces, its short side twenty-eight¹.



About six hundred and forty-five paces from this on the rise, after crossing a brook in the bottom of the wood, is a heap of stones, twelve paces south of the Pfahl. In four hundred and forty paces, near a brook, thirty-two paces to the rear of the Pfahl, is perhaps another. Then

¹ Cohansen, 'Am Maisel.'

in about seven hundred paces the wood ends, and the line of the Pfahl is only to be recognised as a ridge in the arable fields. Then in about six hundred and fifty paces, during which, at intervals, the Pfahl has become more visible, is one of the mysterious flat circular spaces, this time outside the Pfahl to the north. This must be about four hundred and twenty-five paces east of the brook which lies to the east of the Todtenberg. Here we lose the line of the Pfahl for some time, but follow its direction in the wood on the slopes of the Todtenberg, until after crossing a broad ride (Schneise) we strike it again running west by south. In seventy-five paces there is a road crossing it, passing right over the crest of a tower-heap some ten paces south of the Pfahl. The old road must have been a few paces further west. The traces of the Pfahl soon disappear. In four hundred and fifty paces the line leaves the wood and loses itself in a meadow; but we fortunately find very faint traces, and, helped by oral directions, we make our way to where four ways meet, and a group of some twelve or more fine striking old trees marks the site of a market, and the vicinity of the station of Altenburg. The Roman Castle must have been west of these trees and of the road. The place where it has been is evident from the nature of the ground, but it has been all ploughed up, and I found several pieces of pottery in the fields.

From here all trace is lost until some way on in the wood, where, with some difficulty, we struck the line again, very plainly marked. We ascend, and soon come on a large heap (circumference fifty paces) about five paces from the Pfahl; then in seventy paces to a gap in the Pfahl with a heap close to it¹ (circumference sixty-two

¹ Cohausen, 3.

paces); in four hundred paces to a heap¹ (forty-eight paces in circumference), with a road close to it; then in three hundred and twenty paces to a wide road, probably the Fürstenweg. In two hundred and forty paces, at the summit of the wood, is a bigger heap² than usual; in form it seems to be square, with a heap inside it, and it is some five or six paces from the Pfahl.

About seventy-five paces west of this point the Pfahlgraben forks, and near Lenzhahn throws out a second line, which rejoins the main line near Eschenhahn. This point is called '*Am Triangel*.' We decided to take the northern line, and we followed it through the wood for some seven hundred paces, to the hard road to Heftrich, where it seems to wear out, and we took the road into Dasbach.

After luncheon we followed a footpath which leads into a field-road, almost in a straight line with the church; this would continue the line we previously left, and it takes us up and out on to the road to Idstein, where the road to Niederseelbach forks from it. Just before the road is a circular depression, looking much like the remains of the foundation of a tower³.

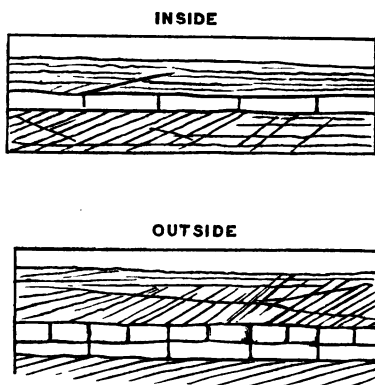
We kept down the fields, but declined to enter the thick wood on the slope, and rounding it, crossed the brook in the bottom, and entered the wood in front. Here the wood was so thick that we were glad to get out and cross the railway by the barrier, and then entered the wood again where it was more manageable. Keeping to the right of the road, we came in about five minutes upon the remains of a tower close to the Pfahl. It had been excavated, and was exactly fourteen feet square. The Pfahl just here is simply a ditch. In three hundred paces

¹ Cohausen, 4.

² Cohausen, 7.

³ Heidenkippel.

we come upon the very best preserved tower we have seen during the whole course of the Pfahlgraben or Teufelsmauer. It is close to the Pfahl, and fourteen feet six inches square; the walls are from one foot to two feet high, and are marked by the stone-work being separated by courses of tiles. This is best seen in the wall furthest from the Pfahl.



The brickwork is double on the outside, single on the inside; I could see no stamp on the bricks. The heap from which the tower has been disinterred has a circumference of fifty paces; there seems to have been a ring or circle round it.

In fifty paces the Pfahl turns south-west, and we soon lose it, and find our way to the *chaussée*, just north of Eschenhahn. From Eschenhahn we must have taken a wrong ride through the wood to the left of the road to Ehrenbach, where the map marks a fine piece of Pfahlgraben. We, however, came out by the station of Zugmantel, which is close to the road, but so thickly overgrown that it was impossible to investigate it: it seemed how-

ever to be of much larger dimensions than ordinary. We had determined to spend the night at Langen-Schwalbach (a watering-place), and therefore, leaving Orlen to the south, and passing Born, we turned our steps thither, and arrived as it was becoming dark (Taunus Hotel). The steep climbs and the deep valleys of this district recall the country we passed through in Württemberg, in the neighbourhood of Murrhardt.

Sept. 26. We took this morning the main road to Kemel, which is a Roman town, and has traces of fortification. Then we took a field-road which seemed to be in the line of the Pfahlgraben, and leads down past Erlen Hof. We were not, however, fortunate enough to find it in the wood as we had hoped, and a second trial in the woods was equally unsuccessful. We sat down to eat our luncheon on a heap of what turned out to be slag or clinkers, apparently the refuse of some smelting operations; and then, continuing our search, finally found the line just beyond the road which runs to the north of the Graue Kopf. About eighty paces north of this road runs the Pfahlgraben, west by north, well-developed, and with a huge ditch. Turning back to the road we made for the Römer Castell marked in the map¹. Where the road branches off there was on the left a huge heap of clinkers or slag. The castle or fort is much overgrown; its northern and longer side measured one hundred and sixty-five paces; the western and shorter, one hundred and thirty-five. The gates of the shorter side seemed to be in the middle, and of the longer side rather nearer to the east. The camp is well preserved, and would probably repay excavation. The eastern gate had been partially excavated.

¹ Cohausen, 'Castell Holzhausen.'

Just beyond, by the cross-roads, we struck the Pfahl again in the wood. In about seventy paces is a large heap, which has been excavated, and is about ten paces from the Pfahl; and in one hundred and twenty-five more is a large squarish heap (fifty-four paces behind the Pfahl), near which it changes to south-south-west. Within the next two hundred and fifty paces it twice changes direction, and here is very strikingly preserved, the bank being in some places quite twelve feet high. Then in two hundred and forty paces it crosses a road; the wood is thick, and the ditch must be twenty-five feet or more wide. In three hundred paces a road is made on it, and it turns north-west, and in some one thousand four hundred and twenty paces more it comes out on the main road to Holzhausen an der Heide, ending in a quarry. At Holzhausen (Post) we were excellently lodged for the night.

Sept. 27. We took the road from Holzhausen for about two miles, then turned down on the first road in the direction of Obertiefenbach, and branched off to the left on a field-road which runs about north-north-west, and represents the line of the Pfahlgraben. This leads straight on to the remains of it in the wood in front, where it is well-preserved, with a bank some eight feet high, and some thirty feet broad at base, and with a ditch to the right, some twenty-five feet in width. In about one hundred and sixty paces it changes to north by west, and in six hundred more it leaves the wood and becomes lost in the ploughed fields to the east of the village of Pohl. We followed the road through Hunzel as far as Berg. South of Berg the map marks a piece as existing, but the *bauers* have destroyed all excepting a piece some five or six yards long, which probably will not survive much

longer. Here the country became steep and intricate. We dropped down to Dick Mühle, kept up just above Geissig, and struck the line again in the woods between Geissig and Dornholzhausen. Its course is about north-west, it is well preserved, and comes out by the Gottesacker, above Dornholzhausen; then it appears as a bank, for a field or two, and then enters a thick wood of young firs in front. It was easier to follow in the older and thinner firs beyond. Here it was easily traced, and after crossing three roads it becomes parallel with the road to Schweighausen, apparently passing just to the south of Hof Dorstheck.

We lunched at Schweighausen (Weber), and then struck it about half-a-mile to the west, in the wood running north-west by west. The name Pfahlgraben is apparently not known here, and we were told that our nearest way to Ems would be along the *Hecke*; and so it turned out to be, for the path kept alongside of the Pfahl about twenty paces to the south or west of it.

In about one mile, this road—or one branch of it—crosses the Pfahl, and at this point on the left, about seventeen paces from the Pfahl, is a tower-heap (eighty-five paces in circumference), which has been excavated. In sixty paces there is a hole as though something had been quarried away; then there is a footpath to the left of the Pfahl, and a wood-road on the right. In three hundred paces there is a heap about thirty paces off, and again in three hundred paces, just where the road to Sulzbach crosses, right on the Pfahl, there is the mark of something larger than ordinary—possibly a double tower-heap. In one hundred and fifty-five paces there seem to be traces of a tower-heap thirty paces from the Pfahl, with a pit behind it. In three hundred paces we have Becheln

immediately to the left of us, with a striking height to the east of it—just the place for a camp. The line may be traced from Becheln for some five hundred and fifty paces, until it comes out on a quarry, and then down through oak and beech scrub some six hundred and fifty paces further, to a road. Here the line changes to the north-east. We unfortunately lost it at this point, but followed a path which brought us out to Heinrichshof, where we found it again, and followed it, partly through wood, partly through field, to near Winterbergerhof. Then the line took us out on a point of view overlooking Ems, in the deep valley of the Lahn below us. We dropped down a steep footpath and found ourselves at the railway station; and, having recovered our baggage, spent Sunday in resting at the Hotel des Quatre Saisons (vier Jahreszeiten).

Sept. 29. Leaving Ems by the Graben Strasse, and turning to the left by the Stadt Breslau, we kept up a steep road almost exactly opposite to the point where we came down on Saturday. In about a quarter of an hour we find signs of the Pfahlgraben immediately to the right of us, gradually growing and becoming unmistakable; the road crosses it, and a footpath continues by it up through the wood, and a very steep climb it is. In one hundred and sixty-six paces we come to one of the flat circular spaces before alluded to, fifteen paces from the Pfahl. In one hundred and fifteen more there is a heap thirty-one paces from it. In this part the ditch seems to have been made through rock, and it must have involved some blasting process, as in Northumberland between Cilurnum and Procolitia, and in Scotland by Overcroy. Here there is no bank but only a ditch. In one hundred paces there is a road and seat; in fifty there are pits close to the line; in sixty a road; and in forty-five

a heap forty-three paces in circumference, and five paces to the west of the Pfahl. Its course here is about north-east, and there is a main road immediately to the right.

In two hundred and seventy paces its distinctness ends, and a road lies on it; but we see it soon on the right of this road, and between it and the main road just mentioned. It becomes still plainer running north-east by north, and must be six feet high, in places perhaps more, and the ditch must be twenty-five feet broad. In four hundred and eighty-five paces there is a tower-heap close to the road on the left, perhaps fifteen paces from the Pfahl. In three hundred and twenty paces is a direction post with a Waldweg to the left, and a tower-heap close to the road, perhaps fifteen paces from the Pfahl. In about four hundred paces a footpath branches off from the main road, which we follow, and it brings us out (in four hundred and thirty paces) still in the line of the Pfahl, on a small road and some fields with Kemmenau below us on the right. The line crosses these fields and forms the boundary between the wood and the fields, until it comes out in about one thousand paces parallel to the road which leads from Kemmenau to the Gross Kopf. We followed along round the Gross Kopf, and down into Arzbach, near which there may be the site of a fort or castellum just to the east of the Church. We left Arzbach by a road which took us out of it to the north-west, up the eastern side of the Mühl Berg. About one and a-half miles from Cadenbach (on the east) we enter the wood of Haferröder, and very soon find the Pfahl running a little east of north, with a bank six feet high, and a good wide ditch. It keeps on and crosses the Neuhäusel *chaussée*. It turns north-west by west, and is well-marked,

though not shown in the map. It runs parallel with the *chaussée* for some 1000 paces, its course being about west by south, until it crosses a road—where we lost it; and were obliged to make our way by Hütten Mühle to Hillscheid, from which we struck up again by a road leading east of north, hoping to find the Pfahlgraben once more in the woods. In about one mile from Hillscheid we were fortunate enough to do so, and found it plainly marked, and running west-north-west. The ditch was very plain, but there was not much bank. In four hundred paces it comes to a quarry and becomes lost—but we recovered the line, and followed it until it reached the *chaussée* to Höhr and Grenzhausen. In the fields it came to an abrupt termination, having been cut up and spread on the ground. A fine piece remained just about to share this fate, and reminded us of what we had lately seen at Berg, and what I have, before now, seen happening to the Wans Dyke, not far from Marlborough.

We followed the *chaussée* for some distance, and then struck down in the direction of Bemper Mühle, just north of which we again were fortunate enough to recover the line forming the northern boundary of a wood, and with boundary stones upon it. In five hundred and seventy paces we found a tower-heap about fifteen paces from the Pfahl, and in six hundred and thirty more we come to the road to Höhr. We took this and made our way to Grenzhausen, which we reached just as the sun began to set. Grenzhausen (zum Deutschen Kaiser) afforded a view of the Mosel, and the Rhine can be seen from a point just before entering Hillscheid.

Sept. 30. Leaving Grenzhausen, we followed the road to Berndorf for more than a mile until we came to the boundary stones on the left, which told us that we had

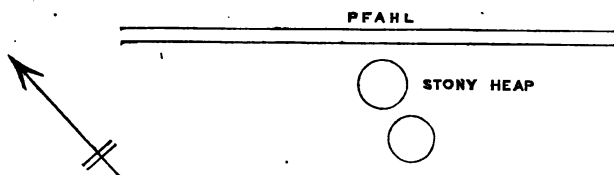
reached both the boundary and the line of the Pfahlgraben. Here a road turns off to the right, and just beyond it is the Pfahl, well-marked and distinct, although not shown in the Ordnance map. Soon it becomes eight feet high, and runs west-north-west. In four hundred and fifty paces it is very fine, running west, with a base some thirty or forty feet wide, and a height of about five feet, and with a ditch nearly thirty feet broad. Hitherto it has been in thicket, but is now in open wood and is well visible. About forty paces to the rear is what looks like a square enclosure with a heap in the middle of it, and close to it on the west is another heap. In one hundred and seventy paces are what look like three or even four heaps near together, and in forty-five paces there is a gap with a road through the Pfahl, and it is much cut about. In four hundred and fifty paces there is a footpath to the right of it, and in one hundred and twenty the road intersects it, or rather more roads than one: and it keeps along the road for some time on the right covered with broom. Here we leave it, and take down the hard road, past the Meiser Hof, with a succession of most lovely views of the side valleys of the Rhine, until we reach first the Kloster and then the village of Sayn.

We have to go some way round in order to cross the stream, and on leaving the village take the first turning to the north, which leads us up again on to the hills much in the line of the Pfahl, about one and a-half miles to the east of Weis. We sat down at the top to eat our luncheon on an evident tower-heap, with another heap, probably of the same nature, close to it. This must have been on the summit above Quengs Mühle. Afterwards, keeping on in much the same direction, we came in about ten minutes to what was unmistakeably the Pfahlgraben, ex-

tremely well-marked, and running parallel with the road, almost due north. In about 1000 paces there is a huge heap (one hundred and six paces in circumference) seventy paces from the Pfahl. Then in sixty paces is a road with what look like three heaps; then in sixty-five paces another heap; and in twenty-five paces another heap, with yet another to the north-west behind it. These groups remind one of the groups on the Taunus, and we wonder if they have been explored. In two hundred and twenty-five paces it leaves the wood, and there is open country on the left, but it goes on as a double hedge with a footpath in the middle. In seven hundred and fifty paces it turns north-west, in five hundred west-north-west, and then in seventy-five paces cuts a road with a finger-post to Heimbach. It keeps on for 1000 paces, then becomes much overgrown, but with a footpath in the ditch, which we follow all along. In four hundred and fifteen paces we cross a wood-road, and there is a tower-heap in rear of the Pfahl, about twenty-five paces from it. Here, too, it begins to descend. In five hundred and ten paces the footpath to Gladbach crosses, and the direction changes to north-west by north. In seventy-five paces it leaves the wood and crosses the open, being much cut about and covered with long grass. Then in two hundred and seventy paces it leaves the open and takes down a pine wood, till in seven hundred and sixty paces it strikes the Heddesdorf *chaussée*, and comes out by a finger-post which designates it *Heidegraben*. We crossed the *chaussée* and entered the wood again, following the Pfahl until it emerged in the road. About one hundred and ninety paces from its leaving the road was what appeared to be a small tower-heap. At this point we gave up the quest of the Pfahl, took the first footpath we could find to Ober-

bieber, and remained there for the night (zum Wiedischen Hof).

Oct. 1. Leaving Oberbieber, we took the *chaussée* as far as Niederbieber. This appears to have been the site of an important Roman station, which was situated just before coming to the road to Segendorf, north of the church of Niederbieber, and south of the copper-wire works. There is now nothing definite to be seen: the remains of the *Castell* are under the plough, but the place where the fort has been can be pretty fairly made out. Then crossing the Wied, from which Neuwied takes its name, we passed by Segendorf, and by a footpath, and then by a main road down into Rodenbach. The line of the Pfahl must have passed through or above Rodenbach. We followed up the Thal, until we came to the head of it, sometimes with a path, sometimes without one, until, after making one or two *reconnaissances* in the woods, we at last struck what was undoubtedly the Pfahlgraben. It came out on the *chaussée* near a bend, crossed it, and went on in the wood with boundary stones upon it. About 1100 paces from this *chaussée* we find two heaps exactly on



the summit, one immediately behind the other, the nearest to the Pfahl being about ten paces from it. One was evidently a tower-heap, perhaps the other was for a beacon.

In about one hundred and fifty paces from this point

the Pfahl seemed to throw out a fork or second line of fortification to the south. This, however, only continued for about two hundred paces, after which the two branches reunited. Here, too, the dimensions of the Pfahl were very good, the ditch was very deep, quite ten feet. In two hundred and thirty-five paces the Pfahl drops down to the *chaussée*. Here we left it, and taking to the road kept on to near Rockenfeld, which we left on the right, and then made onwards, passing Weiherhof, close to which Cohausen marks a castell.

Leaving Weiherhof, we strike it again where it is crossed by a road, and its course is there a little east of north.

We followed it for some distance, till we came out by a sign-post, one of whose arms pointed to Rheinbrohl; then keeping up by a path close to the pleasure-house (or wood-house) we again found the Pfahlgraben in a wood on the Beulenberg. It leaves the wood and comes out on a bare patch at the top of an open field. Then it bears off slightly to the right in the wood, and turns from north-west to slightly north of west. In the wood we find two heaps, one five paces from the Pfahl, the other thirty,—the latter being manifestly a tower-heap, and an extremely good one. Perhaps here there may have been a group of three. Then the ground descends. In seventy-five paces there seem to be tower-heaps above us on the left, and in four hundred and fifty paces we come on a large heap of stones in the line of the Pfahl. The line then comes out on some open fields, but there are no traces of the Pfahl. We followed on over this headland into the wood beyond, and there again, before long, found the Pfahl running a little north of west. Just beyond, for the first time, we enjoy a superb view of the Rhine below us, with striking hills piled around on all sides. But this

was the last we saw of the Pfahlgraben. It has quite disappeared under the plough in the plain below. We, however, descended just by Arienhellerhof, took the line of the brook for some distance, then crossed the *chaussée* and the railway, and walked down to the brink of the Rhine. We were just opposite to the castle of Rheineck; and here, about half-way between Hönningen and Rheinbrohl, the Pfahlgraben must have ended its long course.

INDEX.

Aalen, 34.
 Abzberg, 19.
 Adelstetten, 34.
 Altdorf, 12, 34.
 Altenburg, 50, 75.
 Altenstadt, 53.
 Altmannstein, 3, 4, 11.
 Altmühl, 7, 8, 22.
 Am Pfahl, 50.
 Am Triangel, 76.
 Andernach, 49.
 Anhof, 16.
 Arienhellerhof, 88.
 Arnsburg, 56.
 Arzbach, 82.
 Aschaffenburg, 1, 49.

Bath, 11.
 Bayerbach, 42.
 Becheln, 80.
 Befreiungshalle, 1.
 Bemberlensstein, 36 *note*.
 Bempermühle, 83.
 Berg, 79, 83.
 Berg Capelle, 29.
 Berndorf, 83.
 Berolsheim, 46.
 Bettenhausen, 56.
 Beulenberg, 87.
 Beyerberg, 25.
 Biberg, 12, 17.
 Bingenheim, 54.
 Birklar, 56.
 Boeckshafhaus, 33.
 Bofsheim, 46.
 Borcovicus, 63.
 Born, 78.
 Brech, 35.
 Breitenfürst, 37.

Breitenhüller Berg, 6.
 Brunhild's Bed, 72.
 Brünst, 7, 8.
 Buch, 32.
 Buch Berg, 55.
 Bulau, Gross, 50.
 Burg, die, 61.
 Bürg, Obere, 42, 43, 48.
 Bürg, Untere, 42, 43, 48.
 Burgsalach, 13, 15, 16, 48.
 Burgstadt, 48.
 Burgstall, 21, 23.
 Butzbach, 58, 59.

•
 Cadenbach, 82.
 Capellrain, 43 *note*.
 Capersburg, 63.
 Cilurnum, 81.
 Clynnog, 47.
 Conrady, Herr, 46, 47, 48.
 Cröftel, 74.

Dalkingen, 31.
 Dasbach, 76.
 Degendorf, 33.
 Denkendorf, 7, 8.
 Dennenlohe, 24.
 Dewangen, 34.
 Dick Mühle, 80.
 Dinkelsbühl, 27.
 Ditchley Park, 38.
 Domitian, 66.
 Dorf Güll, 57.
 Dörndorf, 7, 8.
 Dörmershof, 45.
 Dornholzhausen, 80.
 Dorschbrunn, 19.
 Dorstheck, 80.
 Dretschendorf, 12.
 Dühren, 25, 26.

- Echzell, 54, 55.
 Eck, 28, 29.
 Eckartsweilen, 37.
 Ehingen, 24, 25.
 Ehrenbach, 77.
 Eichkopf, 61.
 Elizabethen Schneusse, 71.
 Ellingen, 17.
 Ellwangen, 30, 31.
 Elsenfeld, 48.
 Ems, 80, 81.
 Emsbach, 73.
 Emsing, 12.
 Entenhof, 38.
 Erkertshofen, 12, 13.
 Erlenbach, 48.
 Erlenhof, 78.
 Erpenthal, 30.
 Eschenhahn, 76, 77.
 Espa, Pfofelder, 18 *note*, 19 *note*.
 „ of Riedern, 19 *note*.
 Essingen, 34.
 Eybburg, 23.

 Fauerbach, 61.
 Felchbach, 16.
 Feldberg, 72, 73.
 Fichtel, 19.
 Freudenhöfle, 34.
 Freyhof, 29.
 Frickenfelden, 21.
 Fuchs Berg, 6, 7 *note*, 8, 11.
 Fügenstall, 16.

 Gailsbach, 41.
 Garbenteich, 57.
 Gausmannsweiler, 38.
 Geissig, 80.
 Gelbsee, 7.
 Gelshofen, 25.
 Gelsmühle, 25.
 Gerolzhahn, 46.
 Gettenau, 54.
 Giessen, 57.
 Gladbach, 85.
 Glashofen, 46.
 Glashütten, 74.
 Glauberg, 55.
 Gmünd, 34, 47.

 Gottersdorf, 46.
 Götz von Berlichingen, 44.
 Götzingen, 46.
 Grab, 40.
 Graham's Dike, 35, 37.
 Graue Kopf, 78.
 Grenzhäusen, 83.
 Grim's Ditch, 38.
 Gross Kopf, 82.
 Grüb, 25.
 Grundelshalm, 13 *note*, 21.
 Grüningen, 57.
 Gunzenhausen, 18 *note*, 22, 23.

 Haaghof, 36.
 Haderfleck, 2.
 Haferöder, 82.
 Hälde, 45.
 Haldenrain, 45.
 Hagenhüll, 3, 11.
 Hainchen, 53.
 Halheim, 29, 30.
 Hambach, 22.
 Hammerschmiede, 24.
 Hammerstadt, 33.
 Hanau, 49.
 Hankertsmühle, 40.
 Hansellmann, 42.
 Harsberg, 42.
 Haus Berg, 60.
 Hausen, 59, 60.
 Hecke, 80.
 Hedderheim, 66.
 Heddesdorf, 85.
 Heegheim, 53.
 Heerstrasse, 29, 31.
 Heftich, 76.
 Heglohe, 11.
 Heidegraben, 85.
 Heidenkippel, 76 *note*.
 Heidenstock, 70.
 Heimbach, 85.
 Heinrichshof, 81.
 Hessel Berg, 5, 24, 26, 27.
 Hettinger Wald, 46.
 Heubach, 30.
 Heubach, Klein, 48.
 „ Gross, 48.
 Henholz, 42.

- Hienheim, 2, 5, 36.
 Hillscheid, 83.
 Hinzenhausen, 5.
 Himstätten, 10, 11.
 Hirschreute, 39.
 Höchst, 53.
 Hochstrasse, 34.
 Hoch Weisel, 61.
 Hof Grass, 55.
 Hohenlohe, 42.
 Hohenstaufen, 34, 39, 48.
 Höhr, 83.
 Höllmhütle, 28.
 Holzhausen an der Heide, 79.
 Holzheim, 58.
 Hönnigen, 49, 88.
 Hopfengarten, 45.
 Horlerloh, 19.
 Housesteads, 68.
 Hüll, 25.
 Hundsrückén, 15.
 Hunengräber, 68.
 Hungen, 55, 56.
 Hungheim, 46.
 Hunnenberg, 43 *note*.
 Hunnenfeld, 43 *note*.
 Hunzel, 79.
 Huttenhofe, 33.
 Hütten Mühle, 83.
 Hüttlingen, 33.

 Illenschwang, 26.
 Indernbuch, 16.

 Jagst, 31, 44.
 Jagsthausen, 44.

 Käsbad, 39.
 Kahl, 49.
 Kahldorf, 13.
 Kaisergrube, 62.
 Katzenbach, 29.
 Kelheim, 1.
 Kemel, 78.
 Kemmenau, 82.
 Kessach, 44.
 Kinzig, 50.
 Kipfenberg, 7, 8, 12, 13, 22, 27.
 Kirch Göns, 58.

 Klingen, 39.
 Klingenberg, 48, 49.
 Koch Berg, 4.
 Kocher, 33, 44.
 Kolbenberg, 34.
 Kolnhauser Hof, 56.
 Krotzenburg, Gross, 48, 49.
 Kuhkopf, 62.

 Lahn, 81.
 Laimerstadt, 3, 4, 11.
 Langdorf, 56.
 Langen Bergheim, 51.
 Langendiebach, 50.
 Langenhain, 61.
 Langen Schwalbach, 78.
 Lang Göns, 58.
 Langlau, 20 *note*.
 Lauterbrunn, 18.
 Leidhecken, 53, 54.
 Lellenfeld, Gross, 23, 25.
 „ Klein, 23.
 Lengenfeld, Mittel, 32.
 „ Unter, 33.
 Lenzhahn, 76.
 Leutershüterhof, 44.
 Lich, 56.
 Linderest, 39.
 Lochmühle, 63, 65.
 Lorch, 35, 42, 47.

 Main, 36, 47, 48, 49.
 Mainhardt, 40, 41.
 Maisel, 74 *note*.
 Marienhöhe, 45.
 Marköbel, 51, 53.
 Markt Linde, 55.
 Massholderhach, 43.
 Meiser Hof, 84.
 Merchingen, 46.
 Messner Berg, 4.
 Michelbach, Ober, 26.
 „ Unter, 25, 26.
 Michelsberg, 7, 8.
 Miltenberg, 36, 42, 46, 48.
 Mischl Berg, 19.
 Mögglingen, 34.
 Mönchsroth, 28.
 Mühl Berg, 82.
 Murr, 39.

Murrhardt, 37, 39, 78.
Muthlangen, 34.

Neuhäusel, 82.
Neumühle, 26.
Neuwied, 86.
Neuwirthshaus, 41, 42, 50.
Nidder, 53.
Niederbieber, 86.
Niedernberg, 48, 49.
Niederseelbach, 76.

Oberbieber, 85.
Oberhöfen, 42.
Obermudholz, 32.
Obernburg, 48.
Oberndorf, 17.
Ober Reifenberg, 72.
Obertiefenbach, 79.
Oberwald, 51.
Oberzell, 29.
Ochsel Berg, 6.
Odd Down, 11.
Oehringen, 42, 43.
Onatsfeld, 33.
Orendelstein, 43.
Orlen, 78.
Osterburken, 45, 46.
Ottmansfelden, 17.
Overcroy, 81.

Paulushofen, 8.
Petersbuch, 13, 29 *note*.
Pfahläcker, 8, 44.
Pfahlbach, 43, 47.
Pfahlbronn, 34, 35, 36, 42.
Pfahlbrünnchen, 10.
Pfahldöbel, 43.
Pfahldorf, 9.
Pfahlgraben, 35.
Pfahlheim, 29.
Pfahlmauer, 10.
Pfahlwiese, 8.
Pfalzwald, 46.
Pfersbach, 34.
Pfofeld, 21.
Phoberg, 46.
Pleinfeld, 17.
Pohl, 79.
Pohl Göns, 59.

Pondorf, 8.
Procolitia, 81.

Quengs Mühle, 84.

Raitenbuch, 15, 17.
Ravolzhausen, 50.
Regensburg, 1.
Rehberg, 46.
Rehebühl, 20 *note*.
Reichelsheim, 54, 55.
Rems, 34.
Reut-am-Wald, 14.
Rezat, 18.
Rheinbrohl, 49, 87, 88.
Rheineck, 88.
Rheingau, 49.
Riedern, 20 *note*.
Rinschheim, 46.
Rivals, 47.
Rockenfeld, 87.
Rodenbach, 86.
Röhlingen, 30.
Rohrbach, 16, 17.
Rückingen, 50.

Saalburg, 66.
Salvator Weg, 6.
Sandersdorf, Ober, 5.
Sayn, 84.
Schamhaupten, 5, 8.
Scheuelberg, 30, 33, 34.
Schind Berg, 5.
Schloss Berg, 46, 47, 48.
Schlossbuck, 22 *note*.
Schwabsberg, 31, 32.
Schwalheimer Hof, 55.
Schweighausen, 80.
Schweingraben, 39, 40.
Schwenningen, 32.
See Berg, 5.
Seeboldsweiler, 37.
Segendorf, 86.
Selters, 55.
Siegersberg, 39.
Silber Berg, 58.
Sindolsheim, 46.
Sindringen, 44.
Sixenhoof, 34.
Soden, 49.

- Sollern, 5.
 Staden, 53, 54.
 Stammheim, 54.
 Steinberg, 40.
 Steinheim, 55.
 Stödtlen, 29.
 Stolzenhof, 44.
 Strambach, 29.
 Stuttgart, 42.
 Sulzach, 25.
 Sulzbach, 49.
 Sulzdorf, 33.

 Tanenhof, 33.
 Teufelsmauer, 10.
 Thannhausen, 19.
 Titting, 13, 15.
 Todtenberg, 75.
 Tre Ceiri, 47.
 Trennfurt, 48.
 Treppach, 33.

 Umpfenbach, 47.
 Unter Böbingen, 34.
 Unterhambach, 22.
 Unterhöfen, 42.
 Unter Widdersheim, 55.
 Usa, 61.

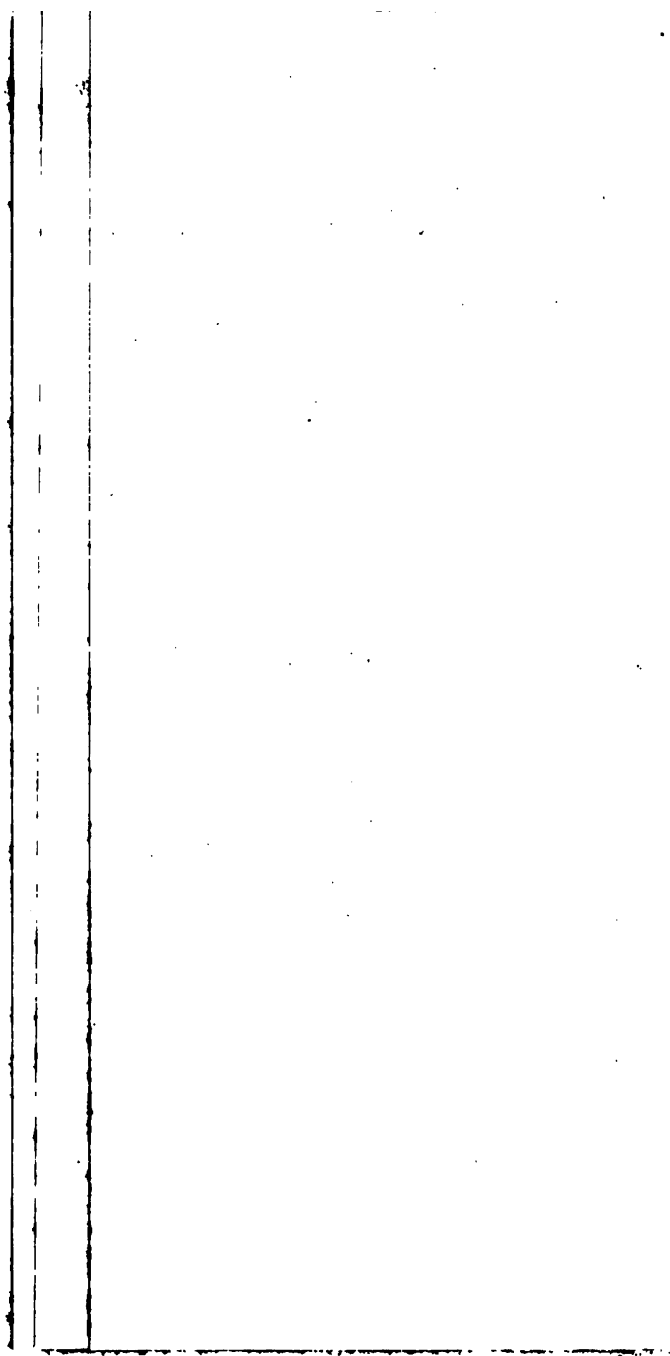
 Wachenzell, 12.
 Walderich, St., 39.
 Walldürn, 46.
 Wallstadt, Gross, 49.
 Klein, 49.
 Wansdyke, 11, 83.
 Wart Berg, 57, 58.
 Watzenborn, 57.

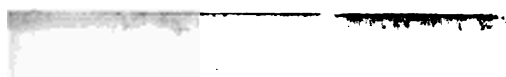
 Wehrheim, 63, 66, 68.
 Weidenhof, 38.
 Weigenhall, 44.
 Weiher, Kreut, 24.
 " Markgrafen, 23.
 " Pfahl, 24.
 Weiherhof, 87.
 Weiler an der Eck, 29.
 Weiltingen, 25, 26.
 Weis, 84.
 Weissenburg, 17.
 Welscherbuckel, 45.
 Weltenburg, 1.
 Welzheim, 37, 38, 42, 46.
 Wenschdorf, 46, 47, 48.
 Westernbach, 43.
 Wetter, 56.
 Wetterau, 49, 56.
 Wied, 86.
 Wied Alßingen, 86.
 Wilburgstetten, 26, 27.
 Windischenbach, 43 *note*.
 Winkel Bühl, 7 *note*.
 Winterbergerhof, 81.
 Wittelschhofen, 26.
 Woerth, 48, 49.
 Wolf Galgen, 7 *note*.
 Wolfsbuch, 8.
 Wolfsbühl, 27.
 Wörmitz, 26.
 Wörnitzhofen, 26.
 Wülzburg, 16.

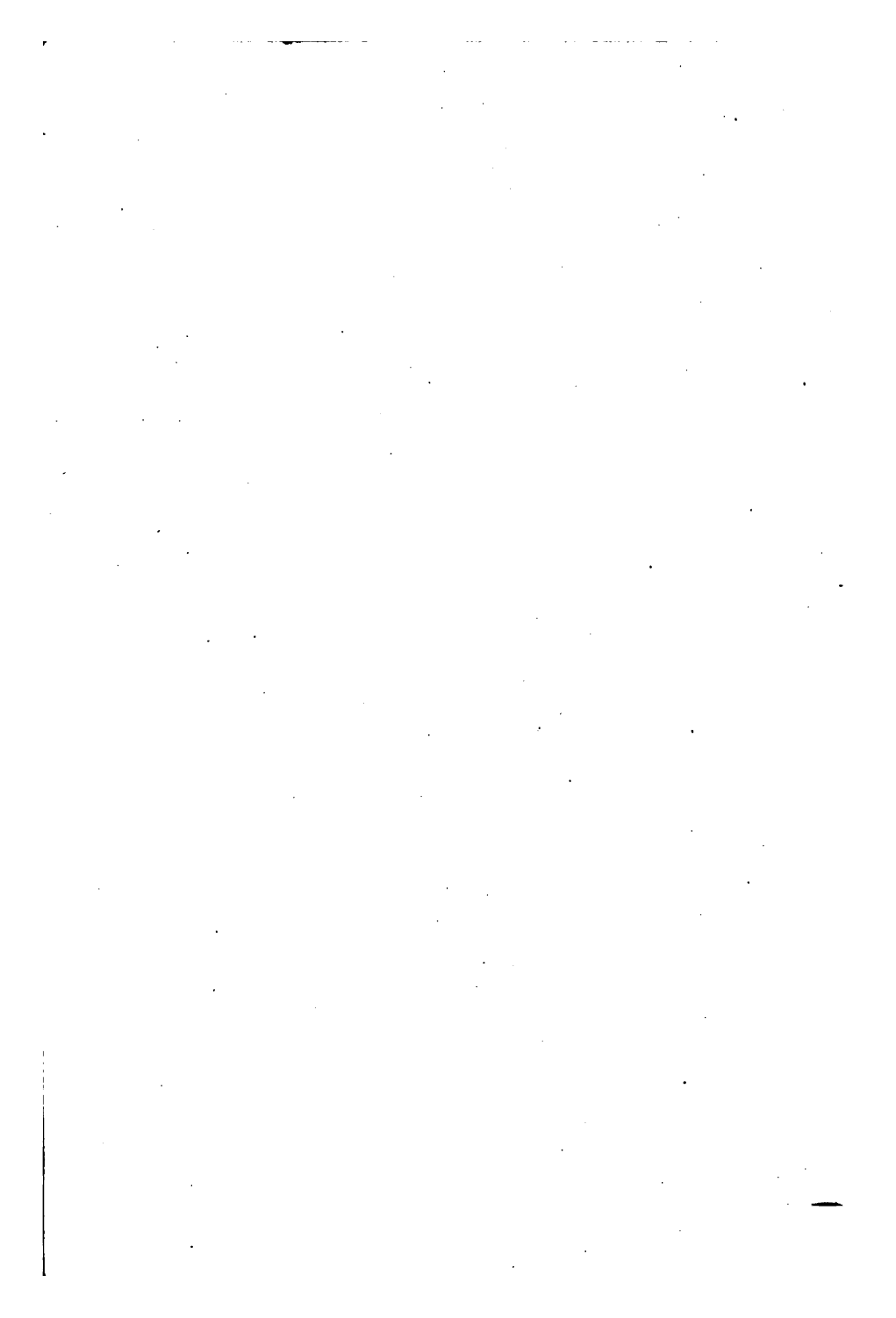
 Zant, 6, 7.
 Ziegenberg, 61.
 Zugmantel, 77.

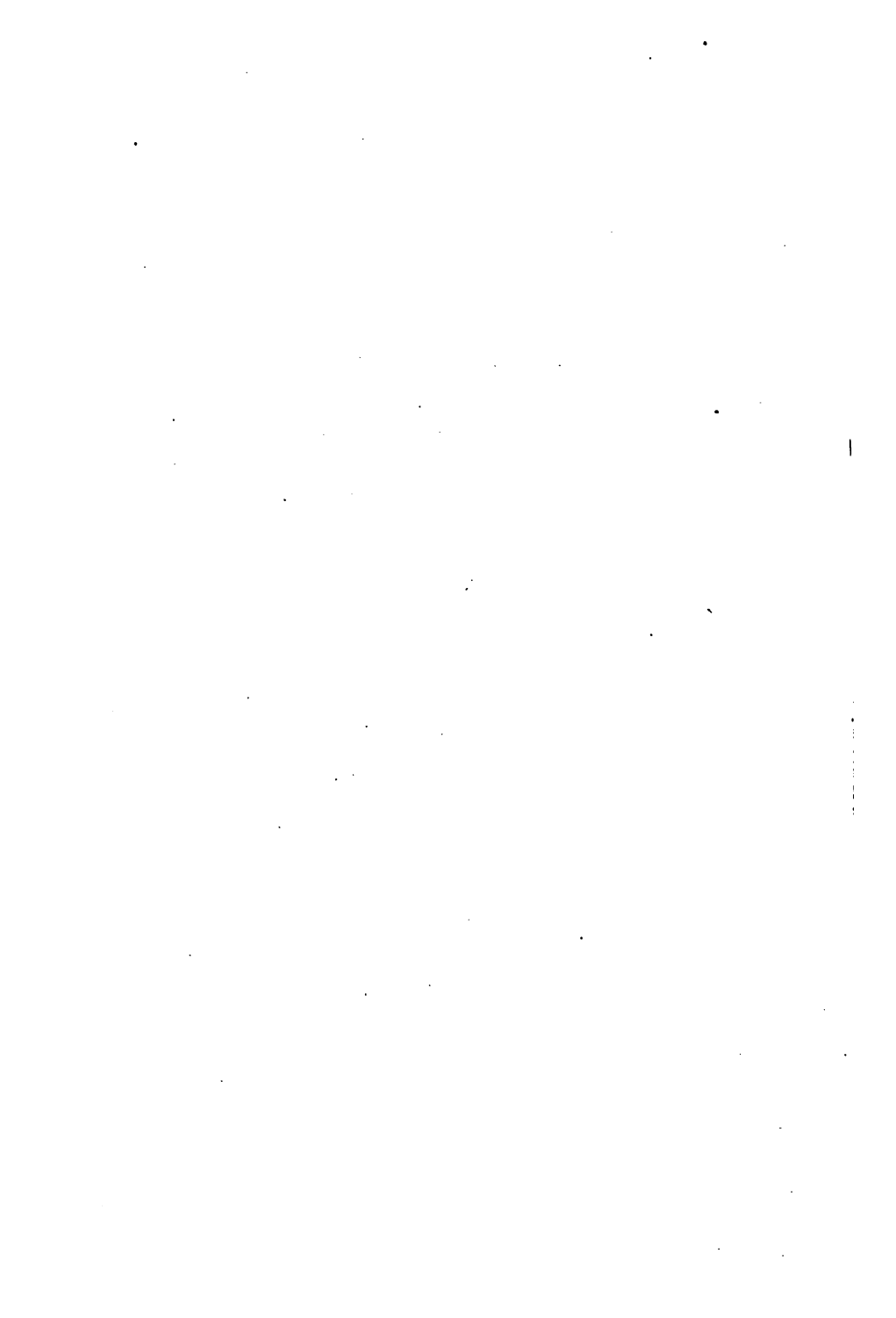
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the 1990s, the number of people in the UK who are employed in the public sector has increased by 1.5 million, from 2.5 million in 1980 to 4 million in 1995. The public sector has also become an important employer of women, with 5.5 million women employed in the public sector in 1995, compared with 4.5 million in 1980.

There are a number of reasons why the public sector has become an important employer of women. One reason is that the public sector has a high proportion of women in its workforce. In 1995, 80% of the public sector workforce were women, compared with 65% in 1980. This is due to a number of factors, including the fact that the public sector has a high proportion of jobs that are traditionally held by women, such as teaching, nursing, and social work.

Another reason why the public sector has become an important employer of women is that it has a high proportion of jobs that are full-time. In 1995, 60% of the public sector workforce were employed full-time, compared with 45% in 1980. This is due to a number of factors, including the fact that the public sector has a high proportion of jobs that are essential to the functioning of the state, such as those in the health and education sectors.

A third reason why the public sector has become an important employer of women is that it has a high proportion of jobs that are well-paid. In 1995, the average salary of a public sector employee was £18,000, compared with £15,000 in 1980. This is due to a number of factors, including the fact that the public sector has a high proportion of jobs that are in the higher grades of the public sector pay scale, such as those in the senior management and professional grades.

There are a number of other reasons why the public sector has become an important employer of women. One reason is that the public sector has a high proportion of jobs that are secure. In 1995, 85% of the public sector workforce were employed on permanent contracts, compared with 70% in 1980. This is due to a number of factors, including the fact that the public sector has a high proportion of jobs that are essential to the functioning of the state, such as those in the health and education sectors.

Another reason why the public sector has become an important employer of women is that it has a high proportion of jobs that are flexible. In 1995, 15% of the public sector workforce were employed on flexible contracts, compared with 5% in 1980. This is due to a number of factors, including the fact that the public sector has a high proportion of jobs that are in the lower grades of the public sector pay scale, such as those in the clerical and support grades.

A third reason why the public sector has become an important employer of women is that it has a high proportion of jobs that are part-time. In 1995, 20% of the public sector workforce were employed part-time, compared with 10% in 1980. This is due to a number of factors, including the fact that the public sector has a high proportion of jobs that are in the lower grades of the public sector pay scale, such as those in the clerical and support grades.

There are a number of other reasons why the public sector has become an important employer of women. One reason is that the public sector has a high proportion of jobs that are in the public sector pay scale. In 1995, 90% of the public sector workforce were employed on the public sector pay scale, compared with 80% in 1980. This is due to a number of factors, including the fact that the public sector has a high proportion of jobs that are in the higher grades of the public sector pay scale, such as those in the senior management and professional grades.

Another reason why the public sector has become an important employer of women is that it has a high proportion of jobs that are in the public sector pension scheme. In 1995, 95% of the public sector workforce were employed on the public sector pension scheme, compared with 85% in 1980. This is due to a number of factors, including the fact that the public sector has a high proportion of jobs that are in the higher grades of the public sector pay scale, such as those in the senior management and professional grades.